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AS EDITOR of the school page of the *New York Sunday Times*, Eunice Fuller Barnard was known to schoolmen everywhere. Now as educational director of the Alfred P. Sloan Foundation, Inc., Mrs. Barnard keeps up her contact with the schools. Her article, "Educating Women as Women," scheduled for the February number, will interest the average school administrator from two angles: as a professional man and as a parent.

This is not the "back-to-the-kitchen" movement of the dictator countries that Mrs. Barnard will describe. Rather it is part of the opposite trend toward centering education about the needs and interests of the individual.

YOU can't miss the Better Washrooms Section which is a part of this issue. Nor will you want to miss the Decorating and Painting Section in February, the A.A.S.A. Convention Section in March or the Commencement Section in April.

The special job your editors want to do next month is to carry forward the magazine's campaign for more inviting school interiors. The trend is definitely away from the cold, drab institutional atmosphere of the past. At comparatively small cost, old buildings may be made gay and appealing by the artistic use of paint, fabrics, floor and wall coverings and new materials not available a few years ago. For administrators and architects planning new structures this section also will be an inspiration.

WHEN there is trouble between principal and teacher, the principal may be wrong. That's the thesis that Principal Chester C. Diettert of the high school at North Judson, Ind., will develop in an article

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for the next issue. Mr. Diettert lists ten "wrongs" in the principal-teacher relationship that administrators will want to make the basis of ten commandments to govern their own attitudes and conduct.

TOO few teachers of modern languages are making use of the radio. Willis Knapp Jones, chairman of Spanish courses at Miami University, has written an article for February that will lead many others to make use of this medium or we miss our guess.

His students have a Listening Post. When first they hear a short-wave broadcast they have a blank look as the flood of words almost drowns them. Sooner or later a familiar word floats by. Before long they catch and identify phrases. Their first successes increase their interest and they start to study harder. This increases their ability to understand other broadcasts, and so a happy circle is set up, to the gratification of the teacher.

"GOING, going, gone," the old advertising slogan, can apply to school clubs also. Some of these extracurricular activities are lively, go-ahead organizations; others are going in another sense, in that they are dying; still others are gone as clubs because they have been absorbed into the curriculum.

In the next issue a technic for evaluating a club program worked out from a five year study of 60 clubs in the McKinley High School, Honolulu, Hawaii, will be presented. Enid S. Smith, dean of women, Bethel College, Newton, Kan., is the author.

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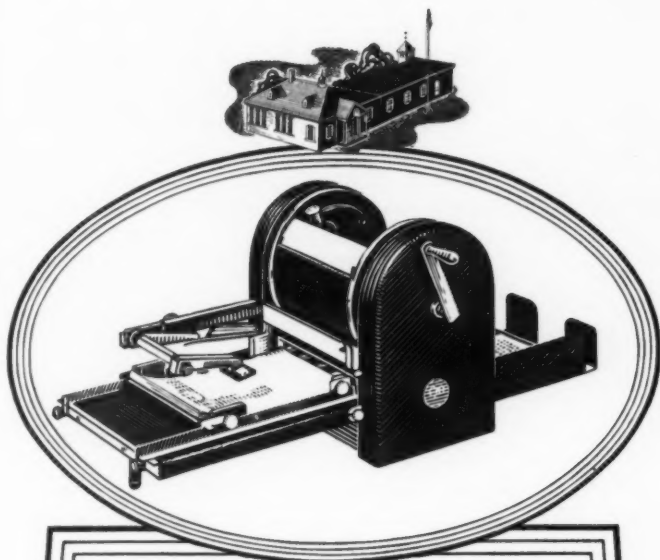
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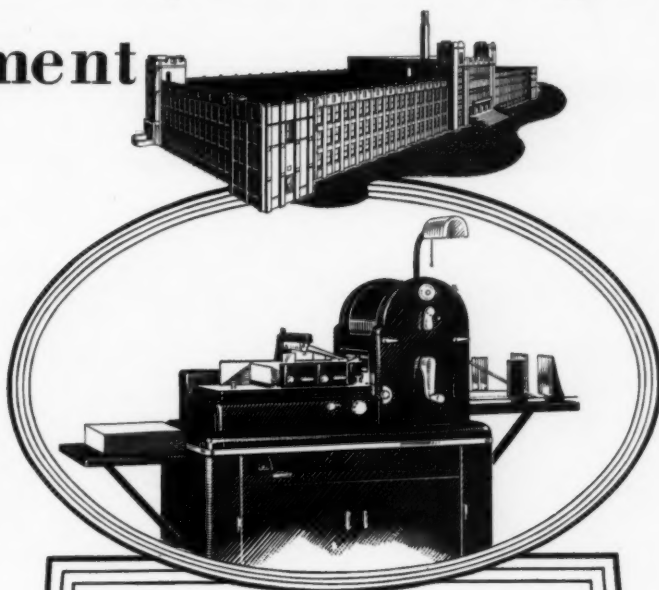
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LOOKING FORWARD

To the New Year

TO THE many thousands of our readers whose steady personal interest in our monthly offering is a never failing source of inspiration to the professional staff of *THE NATION'S SCHOOLS*, we offer our sincere thanks for another year marked by a steadily increasing reader appreciation and reader growth. We wish you all a most happy and prosperous new year.

The New York Survey

IN 1935 the board of regents authorized an "Inquiry Into the Character and Cost of Public Education in the State of New York" and employed a large number of professional specialists, under the direction of Dr. Luther T. Gulick, to study the problem and report recommendations. Most of these technicians were chosen from institutions outside of New York so that their findings would not be biased by sentiment or interest.

After two years of research the findings of the commission are being published in eleven volumes and an atlas. This discussion is concerned with the summary volume only, written by Doctor Gulick and published under the title "Education for American Life."

The surveyors found that the schools, in what is generally assumed to be the best organized system of public education in any state, have been slow in adjusting themselves to changing social, political and economic needs. Their findings are summarized as:

"1. The educational system has not yet adjusted its program to carry the new load imposed by the coming into the schools, particularly into the secondary schools, of all the children of all the people, with their many new and different needs.

"2. The school work for boys and girls has not been redesigned to fit them for the new and changing work opportunities which they must face in modern economic life.

"3. The school program does not sufficiently recognize the increased difficulties of becoming and of being a good citizen.

"4. The educational system has not caught up with the flood of new scientific knowledge about the natural

and the social world which has been made part of life in recent decades and it fails to give boys and girls a scientific point of view and an understanding of the world.

"5. The educational system has not been replanned to meet the new conditions of modern life and the new ways of living in which the family, the church and early work now exercise less influence and in which increasing leisure in later life calls for, and makes possible, a rich and growing inner life.

"6. The citizens and the school leaders of the state of New York do not have a specific, agreed-upon goal. Both groups are going ahead in many directions but without a destination toward which all may bend their energies."

After brief but clear discussion of the reasons for these weaknesses, the summarizer offers definite recommendations for the improvement of New York schools. These include the following:

1. Secondary education should extend from the seventh through the fourteenth year. The central secondary school objective should be general education devoted, up to the twelfth grade, to the study of general science, human relations, community life, world history, general mathematics and the arts. These broad fields of knowledge should be presented as they are generally encountered in life and not merely as semester hours for college entrance. Greater emphasis on character building and training for dynamic citizenship is essential, with guidance service available in all schools. Only a broad vocational education should be given instead of training for specific skills, a dubious present day procedure for public schools. Noncollege entrance courses in the thirteenth and fourteenth years should include new cultural and new subprofessional work to prepare the students to enter technical and semiprofessional occupations. More emphasis on mental and emotional health is recommended in the health and physical education division. Emphasis on play and sports should be placed on those activities which have adult "carry-over" value and which would provide for greater general participation.

Specific recommendation is made that the regents' examinations and diploma be revolutionized with emphasis upon their diagnostic and appraisal rather than

upon their approval value. The local school is to assume full responsibility for its own products.

2. General improvement in elementary education should be attained by increasing school size (180 to 600 pupils), providing for preprimary work beginning with the kindergarten at age 5, organizing a better integrated and more flexible curriculum for individual needs, placing greater emphasis upon proficiency in the tool subjects and providing free textbooks and supplies to all children in public schools.

3. The 8000 school districts within the state should be reorganized into larger central school districts as rapidly as possible.

4. Economies in school costs are recommended through reduction of small schools, elimination of small classes, better planning of buildings, addition of a business manager to large school systems, modernizing of budgetary procedure, accounting and purchasing and more economy in capital improvement through lowering of interest charges and the introduction of a pay-as-you-go policy.

5. Revision of the present formula upon which state aid is granted is recommended to meet changed conditions, with emphasis on school membership rather than on average attendance. The evils of the daily attendance standard as a basis for fiscal aid were quickly seen by the survey committee.

6. Improvements in the quality of teacher is recommended through improvement in teacher training institutions, selection of personnel and more effective professional organization. The extension of tenure to teachers not now included is recommended as soon as proper structural organization makes it possible. The minimum salary should be increased from \$800 to \$1200.

7. The present system of voluntary institutions of advanced learning is considered adequate for this generation and no state university is recommended.

8. Definite provision through the schools for a comprehensive program of adult education is desirable.

9. The power of the state department should be exercised through its leadership influence and the development of advisory mixed commissions, bringing the people into closer relationship to education, is urged.

So far as we can judge, the technical work of investigation and survey has been capably and conscientiously accomplished. The results are not at all startling, merely confirming what specialists in education have been aware of for some years. The recommendations arising from the study of current inadequacies are statesmanlike in their scope. They present in broad, bold strokes a picture of the type of education needed in New York State today.

These publications represent a significant contribution to the improvement of public education and deserve the widest and most objective study by schoolman

and layman alike. The general recommendations would fit any one of the 47 other states as aptly as they fit New York. In a large sense, it is a survey of educational conditions and needs not only in New York but also in every other state in the Union.

Samuel C. Mumford

WHEN Samuel Cranage Mumford, a member of the Detroit board of education for twenty-two years (1907-1929), died on Nov. 21, 1938, a most unusual procedure took place. Not only were the flags half-masted on all schools but, in addition, every principal was requested to bring the children together and tell them about the unique contributions of this outstanding leader to public education in Detroit.

The high tradition of unpaid, unselfish, devoted and statesmanlike service, an outstanding feature of American public education, was never better exemplified than in the case of Samuel C. Mumford.

When first chosen to the old ward-elected and politically dominated board of education in 1907, the public schools were handicapped by small caliber partisan politics. Promotion was through political favor; the janitors were precinct lieutenants whose secondary interest was plant operation. Board members considered the schools as a first rung on their political ladder. There was much gossip about graft in the purchase of equipment, supplies and textbooks and the janitorial "kick-back" system was considered part of the members' prerogatives. The schools were closely interrelated with the city hall machine.

Samuel C. Mumford came into board membership as part of the reform movement that was actually started in 1903. From 1907 until 1912 he represented a militant and hard-fighting minority that sought to effect immediate reforms within the system while working in the community with another gradually growing minority, led by Laura F. Osborn, which was fighting for general structural changes through new legislation. Legislation was passed in 1913 to change from a large ward elected board to a seven member board elected at large, but obstructive litigation prevented this plan from becoming effective until 1916.

Mumford was the only member of the old board chosen by the people to the 1916 reform board and became its first president. This board, composed of outstanding community leaders, some of whose ancestors had helped create the schools in the forties, proceeded within a brief span of five years not only to divorce the schools from partisan politics but also to reorganize them from the kindergarten through the college units. Detroit was the first large city to adopt the continuing internal survey as a definite appraisal procedure.

While credit for the technical changes must be given to an unusually brilliant group of educational leaders,

it is extremely doubtful whether this movement would have made much headway without the courage, vision, determination, understanding and encouragement of Samuel C. Mumford. The reforms were not easily made. Professional inertia and complacency had to be overcome and the still powerful political forces offered much covert and annoying opposition. It took raw courage to participate actively in the period from 1916 to 1921 and those who survived were definitely stronger men.

Whenever things looked black or it seemed that reactionary forces would overwhelm the new movement, Samuel C. Mumford stood with rocklike firmness, shouting his *pro bono publico* motto, and urging on the weary and disheartened. His amazing grasp of educational detail and his clear vision of the desired goal enabled him at times, like a good quarterback, to slap the faltering specialists back into line. To those who participated in the Detroit survey, the opposition of the outsider was mild compared to the righteous anger of this doughty crusader. In a large sense Samuel C. Mumford was the embodied spirit of democratic public education in Detroit. He possessed unusual energy, indomitable courage, a bulldog tenacity of purpose and marvelous imperviousness to criticism when he thought he was right. He never quit. He refused to be beaten, even carrying these characteristics into his play. Staff members who occasionally played poker with him soon learned that winning Mumford dimes was always at the expense of a full night's sleep. On trips of inspection to other school systems he worked all day and forced the professionals to analyze his findings all night. He required little sleep.

His was a restless life, encompassing the energy and activities of at least three men. He worked, played and fought hard. He was always the fighting man, his feet wide apart and his face toward the rising sun. He was the epitome of the spirit of democracy—a tireless crusader for the people and a champion of the underdog. He gave to public education in Detroit something that cannot be bought, the vitality and strength of things of the spirit. His services cannot be dimmed by time because they are not transient but have been definitely transplanted into the lives and ideals of others. So long as public education can produce leaders of this type there is no danger for democracy.

Worthy of Mention

ON THE afternoon of November 29 in an elementary school in Joplin, Missouri, classes were being held as usual with Miss Dollie Board in charge of one room. Suddenly she felt a premonition of impending danger from the ceiling. She quickly marshaled her 34 children out of the primary room and building. A few minutes later the ceiling fell. The impact of the metal lath and plaster load was so great

that it drove the legs of desks and tables through the floor. ~~Had the room~~ been occupied, every child would have been killed and tragedy marked against the school.

Dollie Board, who for forty of her sixty years has been a teacher in these schools, deserves the highest praise for having the courage to act upon her premonition and for the saving of life that resulted from her act. It is another of the unsung heroic services that the true teacher considers as merely in the line of duty.

There is another side to the picture that should have immediate and complete investigation. Why did the ceiling fall? We do not know the exact reason for the Joplin accident. That can be determined only by specific investigation on the ground by competent, impartial specialists.

We have, however, observed many accidents in school buildings and find that plaster does not drop, walls do not crumble and floors do not sink in well-constructed buildings. Sound and honest construction means safety for the children. Every time a board of education attempts economy by the substitution of cheap, inferior, "just-as-good" material in the construction of school buildings it is laying the groundwork for possible future accidents. Every time a board of education employs incompetent architects or contractors, neglects rigid inspection of construction and allows cheapness instead of quality to determine its spending attitude chances are being taken with the lives of children and of teachers.

There are no short cuts to economy in the erection of buildings or in the purchase of equipment. Quality and safety are not related to price-buying. Boards of education cannot be too conservative with respect to the safety of the children entrusted to them.

The Growing Tail

TEACHERS are presumptively engaged to provide instruction for the children. Occasionally certain instructional activities, rational and worth while in themselves, become definitely distorted in practice. A case of this type arose recently in the school district of Saugus, Massachusetts, when the chairman of the school board informed 17 teachers that they must "either sell football tickets or quit their jobs." The junior and senior high school teachers had rightfully protested earlier in the season against this undesired sales experience foisted upon them by the athletic authorities. The board of education gave them the choice of selling or resigning. The dog's tail appears to be steadily growing in length and strength at the expense of the dog.

The Editor

W.P.A.'s



IT IS estimated that the cost of projects of the Works Progress Administration involving the construction or improvement of educational buildings up to Nov. 1, 1938, was about \$254,000,000, starting from July 1, 1935.

This involved work on more than 27,000 individual projects located in every state and in nearly every one of the 3000 odd counties of the nation. Most of the projects involved only one school but many provided for work on several, often all facilities in a school district.

Local or state sponsors of the projects paid an average of 25 per cent of their cost, this money going chiefly for materials and supervision. In the vast majority of cases, the W.P.A. supplied funds only for the necessary labor.

Considering, however, that the latest census of schools taken by the U. S. Office of Education (1935-36) shows that there were 238,867 public school buildings in the United States, it would appear that the W.P.A. program for construction or improvement of educational buildings has probably only made a deep dent in actual physical school needs.

The extent of this dent may be computed by the fact that probably not more than 40,000 of the nearly 240,000 public schools in the country have had a really thorough going over in the way of improved sanitary facilities, modernized plumbing facil-

Top, left: Four room grade school in Mason County, Washington, constructed entirely of local materials, except for lighting and heating fixtures, at a cost of \$28,689. The structure includes a gymnasium and an auditorium. **Center:** Tupelo, Miss., erected this modern high school of steel and brick construction with the aid of W.P.A. labor. **Bottom:** Reinforced concrete grade school at Roswell, N. M., constructed by W.P.A. as a part of Governor Tingley's building program.

27,000 School Projects

By DAVID
NILES

ities, repainting inside and out, elimination of fire hazards and the like in both the W.P.A. and P.W.A. programs. It is true that there were about 33,000 school projects under C.W.A. and F.E.R.A., the predecessors of W.P.A., but many of these called for the expenditure of a comparatively few dollars each, and many others were incomplete when the W.P.A. took over, so that there probably is considerable overlapping in the number of projects. It is unquestionable that many of the more than two-thirds of the nation's schools that have not had W.P.A. projects badly need improvements or repairs. The possibility of their getting W.P.A. aid will be explained later.

These needs could scarcely be computed in a national summary since they vary from month to month and from year to year, including the many factors of depreciation, shifting population and the like, but it is well known that they are huge in the aggregate. In a great many communities the effort has been made to meet the needs out of local funds, without resorting to W.P.A. aid, and it has been the continuing policy of the W.P.A. not to approve projects in communities in which various forms of taxes provide ample means

for the construction or repair of school facilities. In a great many others, tax receipts, for one reason or another, have proved totally inadequate to meet school needs and it is in these communities that W.P.A. aid has been provided.

It should be understood that except in rare cases of obviously faulty engineering judgment or excessive material costs, the Washington office of the W.P.A. has nothing to say with regard to the selection of

school projects. That is entirely a problem for local officials, who are in all cases guided entirely by local needs. If, for instance, the need for improved roads is greater than that for improved school properties and will afford greater opportunity for employment, it is for the local officials to judge. They submit their own projects and the state W.P.A. administrator determines, after the projects have been approved, which will be put into operation. His



Left: An example of the use of native stone in the construction of school buildings is given in this scene of W.P.A. men at work on a school at Bradfordsville, Ky. The building replaces a frame structure long condemned. Above: The building of dormitories is a part of the W.P.A. school construction program. Here the workmen are laying the frame siding on the dormitories at the Alabama Polytechnic Institute, Auburn. A central heating plant minimizes the danger of fires.

guides are, of course, the employment situation and the showing of actual local needs. It is, therefore, distinctly the business of school commissioners and school managers to state their own construction or improvement necessities so that they may be considered by the district and state organizations of the W.P.A.

Most of the projects that have been placed in operation or that have been completed were of the improvement or repair type. In New Mexico there has been a state-wide program for new construction, officially sponsored by Gov. Clyde Tingley. These improvement or repair projects ranged the whole scale of possible school improvements.

From Syracuse, N. Y., comes the word that with the opening of the 1938 fall term every one of its 52 public schools had been given a thorough going over in the way of painting or repairs to exteriors and interiors. The repairs included some badly needed plumbing work.

At Hartford, Conn., nearly every public school plant has received W.P.A. aid in some form or other. Edward A. Willard, construction assistant to the board of education, submitted a report saying: "Through the W.P.A. we have been able to take dilapidated buildings with antiquated plumbing, heating and lighting facilities and some with serious structural faults and make them over into thoroughly modernized plants, with excellent lighting, adequate heat and fine toilet facilities, which will serve the city of Hartford for many years to come with a minimum cost of maintenance."

A recent report from Arizona states that since the operation of the W.P.A. and its predecessors 29 new school buildings have been erected in the state and 207 others have been modernized or enlarged or both. At St. John's, in Apache County, pupils had been attending school in an abandoned residence because the old school had been condemned. Financial conditions precluded erection of a new school until the W.P.A. provided the labor to erect a modern six room building.

The trend has been distinctly toward the building of consolidated schools to replace the outmoded, sometimes insanitary, poorly lighted

BEFORE



AFTER



The old and the new: Two schoolrooms in Cowley County, Kansas, photographed on the same day, illustrate the difference between schoolroom interiors that have not and that have had the benefit of a P.W.A. project.

and ventilated one room schools. A notable instance of this is in Pike County, Ohio, where seven four room centralized schools replace 41 widely scattered and altogether outmoded one room schools. A competent school bus service has been provided, much better curriculums are offered and the expense to the county is little more than before.

There are many other notable instances in the W.P.A. records of the construction of consolidated schools to replace multiple one room buildings; each has its separate story. However, at the beginning of most of them is the recital of the fact that the county or the school district or the parish has been the beneficiary of a road construction program that has

made bus transportation possible in all weather.

The W.P.A. provided the labor to construct 46,649 miles of these roads up to Oct. 1, 1937 and made improvements or repairs to an additional 158,693 miles. This was supplemental to a large amount of road work done by the Civil Works Administration and the Federal Emergency Relief Administration.

The need for consolidation has long been recognized in many communities but it has been more or less a dream as long as the roads were in such condition that even a short period of bad weather made them impassable. With the roads placed on an all-weather basis, it has not been too difficult for many enterprising school authorities to find the means to finance sponsors' contributions for consolidated school projects.

Along with these projects, in most cases, is the construction of bus stop stations to permit children to wait in dry places. These various activities have been so coordinated in many instances that a complete rehabilitation program has been possible.

Kanawha County, West Virginia, has 180 rural schools, all except 58 of which have been thoroughly rehabilitated by W.P.A. projects. A report on one of these explains that the Ronda School in Cabin Creek district had deteriorated badly. "Rotten underpinning and front steps were replaced; siding was renewed; new electric wiring was installed, eliminating fire hazards; new blackboards were built, and the building was repainted inside and out. This is typical of the work done on other rural school buildings although some of them have been practically reconstructed."

Utah reports indicate that 613 of the 642 schools in the state had been reconditioned or rebuilt or new structures provided by the end of 1936. Oklahoma boasts a school construction and repair program of more than \$5,000,000 for the construction of 359 new school buildings and the reconditioning of an additional 321. In every case, the Oklahoma report states, a principal objective has been fireproofing.

Considerable emphasis has been placed on the improvement of sanitary facilities as is shown by this

statement of Clyde A. Erwin, North Carolina state superintendent of public construction: "The state will never know the debt of gratitude it owes the W.P.A. for the fine work it has done in improving the sanitary facilities in hundreds of our schools. Pure drinking water and modern toilet facilities are now available to children in practically all of the schools."

While most of the work has been of a routine nature there have been

several examples of emergency replacement of schools made necessary by fire or other reasons. One of these was the recently completed Henry W. Moore School near Candia Four Corners, N. H. It was burned in May 1938 and the school district had \$13,000 insurance recovery. With this sum and a W.P.A. allotment of about \$7000 for labor, a modern brick and concrete school was constructed in time for the opening of the fall term.

Basement That St. Charles Built



WINIFRED COSTELLO

IN THE midst of the great agricultural district of Floyd County, Iowa, stands a model rural school that is the result of willing cooperation by the people of the community with the school board.

District No. 10 is one of thirteen schools in St. Charles Township. Last year a little more money was allotted for school improvements than had been provided in lean years.

Residents of the No. 10 school district appeared before the school board and presented their request for a basement, equipped with a heating plant, for the one room school. They agreed that if the school board would furnish the material, they would donate their time and labor. The board willingly granted their request, with the provision that the district would limit its expenditure for this project to \$500.

As soon as the men had finished harvesting the grain crops, work was begun on the school. They donated

their teams, time and labor. The older boys enrolled in the school helped also; the younger boys served lunch and acted as water boys.

Two drains were included in the basement structure. A sturdy brick chimney was erected. In one corner of the basement a coal bin was constructed with a partition dividing the kindling from the coal.

A committee was named to visit the different heating shops so that the school might obtain the best type of furnace for the least amount of money. A reliable make of furnace was installed.

A clothes rack, constructed of 1/2 inch gas pipe and installed on one side of the basement, has a shelf above for lunch baskets.

The pupils showed their appreciation of the school improvement to their parents and the school board by having a party for them soon after the opening of the school. They planned the entertainment with little assistance from the teacher.



Two Jobs That

CLARENCE

"Oh, is that all you want of me?" Paul breathes a sigh of relief upon hearing that the counselor-administrator has a job to offer rather than a lecture to give.

ALTHOUGH the dangers inherent in combining guidance and administrative activities in one person are recognized by most trained and experienced guidance and personnel workers and by many educational administrators, this combination exists in a number of schools. Many administrators who are now taking steps to meet the public demand for more effective guidance services may not be sufficiently aware of this obstacle to the realization of a permanent effective guidance program.

Experience shows that attempts to combine guidance and administrative functions in one or more staff members result in: (1) lack of pupil confidence in the counselor and a consequent hesitancy to consult him freely and confide in him fully; (2) a faltering and ineffective enforcement of discipline; (3) a feeling of futility and discouragement on the part of the counselor, owing to a lack of opportunity to carry on the constructive guidance for which he is trained, and (4) an emphasis on emergency measures and remedial

efforts which deter the development of a comprehensive program of preventive and constructive guidance.

The administrative duties most commonly assigned counselors are the maintenance of discipline and the supervision of attendance. The counselor-administrator (as we shall refer to this hybrid) is responsible for pupil adjustment to school rules and routine. All violators are sent to him and he is expected to ferret out all other problem cases. For this purpose he is often assigned patrol duty within and without the building.

The counselor-administrator is frequently placed in charge of attendance. He keeps the records, investigates causes of absences and tardiness, issues admittance slips to returning absentees and is expected to improve attendance and punctuality. He is the truant officer.

Educational guidance of the type that is chiefly concerned with the counseling of failing pupils is frequently a prominent aspect of his work. He is often the home visitor for his pupil group, the supervisor

of pupil activities, sponsor of social functions, head of the lost and found service and lunch period supervisor.

Such assignments are sometimes made by the administrator without thought, are motivated by a desire to lighten a heavy load or are an attempt to justify the nonteaching assignment. A more common reason is the catch-all concept of guidance. All activities and services that have the slightest aura of humanized treatment or individualized education clinging to them are called guidance and are dumped into the counselor-administrator's lap.

The most common reason for such assignments appears laudable and is theoretically sound. The educator believes that personal development is the central task of education and that the guidance approach should be made to all pupil problems. Since misconduct, unnecessary absences, lack of punctuality and failure are due to maladjustments to school and society, he reasons that the direct application of guidance will assist in developing vital interests in school. From this premise he concludes that the obvious place at which to strike is the point where maladjustments are greatest and most disturbing to school routine, the problem pupil. He reasons that coordination of guidance and administration will preserve a closely knit organization and enable the counselor promptly to detect and serve all pupils needing attention, especially problem pupils.

No exception can be taken to his analysis of the needs of pupils or of the promise of guidance to solve or ameliorate their problems. It does not follow, however, that the idealistic organization selected is either expedient or wise. Let us examine the proposed solution, first, from the theoretical angle.

An organization designed to serve the deviant first and most efficiently is likely to neglect the norm. Further,

Don't Mix

W. FAILOR

most teachers, whatever their training, tend to teach and to treat pupils as they were taught and treated. Pupils tend to learn and to behave as they have learned and behaved in the elementary school. They resent imposition and coercion but expect them and are lost without them. The guidance viewpoint of teachers and pupils must be built up slowly over a period of years. Teachers must be trained to use guidance methods and pupils must be taught to understand and appreciate them.

As a consequence, it is probable that for some time to come most guidance programs will, of necessity, pursue a slow and circuitous route and act as adjuncts which serve to ameliorate and partially to remedy the narrow aims, obliviousness to social and economic changes and assembly-line methods of the traditional secondary school. Highly desirable as the ideal organization of guidance is, it can be attained only by taking steps one at a time. The process cannot be hurried.

The most serious stumbling block to the personal correlation of guidance and administration is the prevailing demand for administrative efficiency. Strikingly apparent as this is in most definitions of administration, it is even more real in the actual school situation. Caught in the meshes of factory production methods, the administrator is constantly pulled by the dearth of time and money to that which is of greatest immediate efficiency. The long-time aims of education, including that which is best for individual pupils, are frequently lost. Since individualization of education is disturbing to routine and therefore detrimental to immediate efficiency, the day-to-day demands of the job are enough to incapacitate most administrators for effective counseling.

Although the counselor cannot go blithely on his way without regard



Sylvia came to her counselor-administrator's office at the end of the school year to ask for an autograph. As the counselor-administrator wielded the pen, Sylvia curiously inspected the room and said proudly: "You know, Miss Jones, this is the first time I have been in your office. Isn't that doing pretty well?" Sylvia's reaction is a typical one.

for exigencies, he should not be made to feel a personal pressure of a type that must be met by a sacrifice of pupil welfare. He should be able to pursue individualization with a singleness of purpose checked only by the administrator's power to modify and reject. A counselor should be valued as much as an *alter ego* of the principal as he is for his direct guidance services.

Moreover, the administrator must be constantly on the alert to avoid setting precedents. Any flexibilities in procedures are grants made as quietly as possible and in exceptional circumstances only. The counselor, on the other hand, finds no two pupils alike. The success of his work hinges on his dealing with them as individuals. At some future time pupils may become accustomed to individual treatment and the fringe that takes advantage of dispensations may be reduced in size and influence. Until that time approaches, it is difficult to conceive of a counselor-administrator who can conscientiously discharge both of these functions.

An additional incompatibility is apparent when we realize that although the wise administrator seeks to conduct his school on a democratic plane by gaining teacher and pupil consent, his function is essentially magisterial and coercive. That is to say, if and when consent is not given, he must compel. Possible punishment, of which all elements are conscious, stands in the background and facilitates consent. The counselor cannot use coercion.

At some future time, educational content may be so vital and its methods so impelling that most pupils will generally accept responsibilities without actual or implied coercion. At the present time the counselor-administrator finds himself in a dilemma of real magnitude.

A few actual cases will illustrate the attitude that most pupils are certain to assume toward a counselor-administrator and his work. These and similar cases have been reported by a number of counselor-administrators, two of whom held the same position in successive years, and by others working in guidance positions

in the same schools at the same time.

Paul was sent a note to call at the guidance office. He reported with bated breath, obviously worried, and was asked by his counselor-administrator if he would be interested in a part-time job for which the school had received a call. Sinking into a chair with a sigh of relief the boy gasped: "Oh, is that all you wanted of me?"

Pete's mother telephoned a counselor-administrator that she was ill and wished her son to be excused at once. The summons was sent to Pete's teacher, who thoughtlessly said so that all the class could hear: "Your counselor wants to see you." As Pete, red of face, went out of the room, he was followed by the snickers of his classmates. He knew he was "in for a lot of kidding" but did not know what he had done to be called to the guidance office.

Pupils Avoid Counselor

Sylvia came to her counselor-administrator's office at the end of the school year to ask for an autograph in her yearbook. She was not particular who signed as long as she had a large number of autographs. As the counselor-administrator wielded the pen, Sylvia curiously inspected the room and said proudly: "You know, Miss Jones, this is the first time I have been in your office this year. Isn't that doing pretty well?"

A trained and experienced guidance worker had been offered a position as counselor-administrator in a certain community high school. Striking up a conversation with a boy on the street he asked: "In what year of school are you, Jack?"

"I'm a junior," was the reply.

"That's fine! I may be your counselor next year and we should get well acquainted."

"I guess not! I don't get sent to that office."

Bob felt that he was unjustly accused of disturbing a study hall so he failed to report to the teacher after school as requested. Refused admittance to the study hall next day, he went to his counselor-administrator who heard his story and then tried to get him to realize that the after-school appointment was not so much a punishment as an opportunity to clear himself. These guidance meth-

ods were of no avail. Neither was his direct advice.

Forced to discharge his disciplinary function, the counselor ordered Bob to report to the teacher. Bob refused, and before the case was settled the lad's mother protested what she claimed to be an injustice and offered this criticism: "You know, Bob thought he would go to his counselor for advice but all he received was an insistence that he do just what this unfair teacher demanded."

Yes, Paul, Pete, Sylvia, Bob, Jack and all their friends know which pupils are sent and what usually happens in the counselor-administrator's office. As a consequence, they avoid that office and its occupant whenever possible. This may be good for discipline, but it is fatal to voluntary guidance.

Rapport, so essential to a good guidance interview, is difficult to attain with the few pupils who voluntarily call at the guidance office. Many pupils commit minor misdemeanors, have not been discovered, but fear it. Even those who are convinced and proud of their good conduct and whose associates may be similarly classified must feel some restraint in the presence of the school disciplinarian. This is a natural reaction. Many consistently law-abiding motorists will confess, if quizzed, that they feel and behave differently when in the presence of a traffic officer.

It is the chronic offenders who set the tone, pitch and tempo of the counselor-administrator's work. Although they usually constitute a small minority of the student body, they demand the majority of his time, they feel and assiduously spread dissatisfaction and resentment and they do not desire and usually are not amenable to guidance. Though their adjustment should be attempted, the ultimate and only effective solution is expulsion from school.

Here again we run into our incompatibles. If the counselor-administrator does bring himself to recommend a step at such variance with his philosophy, the most convincing oral or written report to the principal lacks persuasiveness compared with the constant experience of dealing with the offender. This experience the principal has not had.

To him the boy is a first offender and is usually treated as such. Thus discipline is diluted by guidance.

Many teachers are dissatisfied with the support they receive from the counselor-administrator. They express disgust for the "soft" methods and feel that "nothing is done" when they refer cases of misconduct. The blame is laid at the door of guidance and their regard for this educational function is weakened.

The weak teacher promotes lack of confidence in the counselor-administrator by resorting to such threats as "Do that again and I'll send you to your counselor" or "I'm going to tell your counselor." The comparative ease with which referrals can be made tempt the poor disciplinarian to "pass the buck." Except in the most serious cases, the principal does not learn of teacher weaknesses in this regard and therefore cannot provide the teachers with the training and assistance needed.

Weakens His Guidance Skill

As an individual and professional worker the counselor-administrator has faith in the intrinsic worth and goodness of youth. To him mankind is improvable. To deal, day after day, with the worst element of the school is sure to undermine and likely to destroy that faith. The necessary use of coercive and precedent-avoiding technics weakens his guidance skills. He is constantly irritated by the endless parade of offenders who prevent him from assisting the many who need his counsel. Feelings of futility and frustration are the results.

The ultimate and most serious result of the combination of functions is that guidance bogs down to a level of the forced "adjustment" of pupils to a set school routine. It tends to become palliative and remedial rather than developmental and preventive. Efforts are concentrated on those who have committed overt acts. Those whose maladjustments are covert are neglected. Those who need real educational and vocational guidance will not seek it in the "doghouse."

Guidance, to be effective, must be a long-time process, not a series of noncontiguous and unrelated events

(Continued on page 54)

Why Fear Federal Aid?

CHARLES MONROE BARKER

FEAR of federal dictatorship in education has spread over a large area in this country and numbers among its victims many persons prominent in educational work. Agreement seems general among school people that federal funds are needed to place education on a substantial basis and to bring about greater equality of educational opportunity.

That sum of \$855,000,000, for instance, which the President's Advisory Committee on Education has asked Congress to appropriate during the next six year period will be none too great as an initial fund to do the things that the committee feels should be done. The point at which the fear seems to center is that with this appropriation there shall come federal stipulations, controls and regulations that will endanger state and local administration of school affairs. The appropriation policy that seems to be meeting with the least opposition from educators is the one that would turn over to the states this vast sum of money without making any attempt to regulate its expenditure. It is recommended that states, once in possession of this federal money, should be free to spend it in whatever way they see fit.

The argument which some schoolmen advance in favor of federal aid but against federal supervision of that aid is illogical, as a little careful analysis will reveal. In certain of our states today there is a definite trend in the direction of increased state aid for education. This trend has been motivated largely because of the inability of certain local school districts to furnish a respectable educational environment for their children.

When this additional state support comes to these underprivileged districts it has some "strings" attached. In other words, the state sets up qualifying regulations as to how the money is to be spent. In accredited schools there must be a definite per

capita expenditure for the library; playground and laboratory facilities must come up to certain standards; state and county adoptions of textbooks must be installed; only teachers holding valid certificates are to be hired, and, in some instances, the amount of salary to be paid to the teachers is named by the state.

The school directors in these local districts and the teachers employed by them could object to these state funds on the grounds that their reception destroyed local autonomy, set up state dictatorship or brought about an unwarranted interference with the rights of private citizenship. As a general rule, however, no such objections are raised. It is generally conceded that the state department of education has the educational welfare of all the children at heart and

With federal aid properly administered, a truly American education system could be developed because it could then become free, public and equal, contends the school head, Priest River, Ida.

that in all probability the state department is better qualified to set up standards for graduation, teacher certification and the like than are the local districts.

If we go back a half century or so in the history of American education to the preconsolidation days, when practically every village or rural community was attempting to finance and administer its own educational system, we can find in the records arguments that sound strangely like those now being advanced in certain quarters against federal aid with federal supervision.

The first advocates for consolidation were met with organized opposition centering around the "loss of local autonomy" argument. If we surrender the identity of our local district, the people said, we shall lose many of our rights for self-determination.

These people were correct in their reasoning, for there was a certain loss in local authority. Mr. Brown was no longer able to sell cordwood at the schoolhouse and Mary Doe was no longer able to hold her teaching position against the competition of better trained teachers. But losses like these were slight indeed when compared to the gains that were made. After consolidation everyone discovered that, while the educational unit had been greatly enlarged, the interest in child welfare had by no means been lessened and, also, that the people who were paying the costs of education were still in control of their schools.

Thus, in advocating federal aid with federal stipulation, there need be no well-founded fear of federal dictatorship, at least not in any bad sense of that term. If America ever has an educational dictatorship, it will be a volunteer dictatorship representing the will of the majority and one that will have the good of the child and of society at heart. If the whole people of this country should wish to raise the educational level for all the children of all the states by creating some form of general taxation with which to finance their program of educational uplift, it is within the scope of democratic government to allow them to share in the management of such additional educational funds. Any attempt to circumscribe the national control of national funds would be a form of taxation without representation, and this is precisely what we would have if federal funds were granted without federal stipulation.

Federal supervision of federal funds is not only well within the

theory and practice of good democratic government but there is a definite need for such supervision. The combined intelligence of the nation as a rule furnishes a safer and more progressive basis for operation than does sectional opinion. There might be instances, for example, in which an out-and-out grant of money would do little to raise the general educational level of a given state. The federal government should be in a position to insist that whatever funds it has at its disposal be used where the educational need is the greatest.

Such educational advantages as adequate buildings and equipment and well-trained and economically secure teachers are on a much better footing in our large cities than in our small towns and rural communities. Without some kind of federal regulation protecting these weaker communities political influence might spend the bulk of federal funds where it is least needed and thereby widen the already shameful difference between rural and urban educational facilities and practices.

Equality Is Mere Talk

The American people are committed to a policy of equality of educational opportunity, but to date this has been chiefly an affirmation of principle. It is true that children residing in a given city do have largely the same educational opportunities, but there has been little done to equalize educational opportunities throughout the larger political units, such as the county and state. Society should have advanced by this time to the point at which we may reasonably expect certain basic standards of education wherever school doors swing open to receive children. Laboratory facilities for offering science courses in the small high schools, for example, should be adequate and so should the libraries, the textbooks and the classrooms themselves. Teachers, too, in the small town schools need adequate salaries as well as reasonable tenure. Here is a large field for federal regulation that should hurt the feelings of no one.

If the federal government had never attempted to act concurrently with the states to improve education,

there might be some justification for feeling dubious about the plan, but the overly cautious and fearful should reflect on the fact that we already have a well-established federal aid program that is working to the betterment of all concerned. It should be recounted that since 1862 the federal government has given to the states some eleven million acres of land, the sale or rental of which has furnished much of the operating budgets of the various land grant colleges throughout the country.

Federal Aid Is Not New

For more than twenty years the Smith-Hughes vocational agriculture classes have been conducted in the high schools of this country. The government is at present spending approximately fifty million annually in helping finance this work and, if one may judge by the rapid spread of these courses, the federal control element cannot be too obnoxious.

In all fairness to those opposed to federal jurisdiction of any kind, it should be stated that there might be instances in which federal stipulation might lead to a loss of local autonomy favoring federal dominance, but the same candor also would force the admission that federal regulation also might act as a check on crooked state politics.

At any rate, there is really no occasion to shy at federal concurrency. The government during 1936 aided the states in road building to the extent of \$489,000,000. If a state may receive funds for road construction without becoming demoralized in the process, why may it not build schools under a similar plan and, if need be, administer those schools in accordance to the will of those who are willing to pay for them?

It would clarify matters greatly if those opposed to federal stipulation would state frankly what their fears really are. Speaking as a school administrator of more than average experience, I can see no reason why the profession to which I belong would not fare just as well working under a combination of local, state and federal control as under strictly local determination. It seems to me that somebody in America ought to be brave enough to admit that there might be such a thing as having too

much democracy in education. I feel certain that a national survey of teacher opinion would reveal no great fear of federal dominance. If anyone can show how the children themselves would have anything to lose as a result of a greater stabilizing influence of the state and federal governments, then there might be more validity in the arguments of the opposition.

The future of education in this country, like the future of many other social processes, rests largely in the hands of the men and women whom society has employed to administer its schools. If this leadership is enlightened, creative and courageous, American education ought to go on to new heights of achievement and our boys and girls might have an opportunity for the first time in our history to get their education in a school system that is truly American—American because, with federal aid properly administered, education could then become free, public and equal.

Letter to Parents

"Dear Mother: We are pleased to have your child enrolled in our school. We will do our utmost to give her good training. Often parents ask if there is anything they can do to help so I am making a few suggestions.

"Train your children: (1) to be independent by teaching them to dress and undress themselves; (2) to put on and take off wraps and overshoes; (3) to put away or to hang wraps properly; (4) to learn to be right handed; (5) to be polite; (6) to respond promptly when addressed; (7) to put away toys and materials; (8) to learn proper use of the handkerchief; (9) to tell their full name distinctly; (10) to tell their parents' names; (11) to tell name of street and number of residence; (12) to go home alone if possible. Parents are asked to mark the child's wraps, overshoes, hats and gloves to facilitate locating lost articles and to join the preschool mothers' club. The meetings are once a month and the dues, 10 cents for the year."—ETHEL WHITNEY and MARY BELLE HOPKINS, *Teachers, Campbell School, Evansville, Ind.*

The Story of Mathville

HUMPHREY C. JACKSON

THE teaching of any course of study to a group of pupils offers a challenge to the instructor. There are certain fundamentals that must be taught with a reasonable degree of mastery. After these fundamentals are given the teacher looks for ways of enriching the course by bringing in supplementary material. Some of this supplementary material should be chosen to add interest to the course of study while other material should be adapted to the individual abilities of the pupils. Still other material should bring about a greater realization of the importance of studying that particular course, showing how it ties up with everyday life.

The aims of a project developed in the 8A-1 mathematics class at Grosse Pointe High School, Grosse Pointe, Mich., may be classified as: (1) course enrichment, (2) motivation, (3) provision for individual differences and abilities and (4) correlation of mathematics to problems in life.

The 8A-1 section was comprised of pupils of higher ability than average. The 37 pupils represented the upper fifth of the group enrolled in the 8A mathematics course.

Early in the semester it was discovered that most of the problems in the course related to mathematics in life. It was suggested that the class organize as a community, solving the problems as banks, insurance companies, town officials and business men might. It was decided to devote four days of the week to the study of the various problems arising in a community modeled after the typical town unit in Michigan. The fifth day was to be set aside to carry on community affairs.

A general meeting of the citizens of this community resulted in the selection of Mathville as the town's name. A mayor was elected, as were judges and other city officials. Every pupil was included in at least one department of the city, depending

Mathville is a well-run municipality that was developed by eighth grade pupils at Grosse Pointe, Mich., where the author is a mathematics teacher

upon his interests and abilities. A spirit of enthusiasm was shown from the start by the campaign speeches preceding the election of the mayor.

Soon the citizens of Mathville realized the need for a bank to carry on the business of the town. A savings and loan company was organized. With a capital stock of \$1,000,000 and shares having a par value of \$100 selling for 1 cent each, it was not long until all the citizens owned at least one share of stock. The election of the board of directors and officers of the bank followed the selling of the stock and tellers were chosen to take care of savings accounts.

The board of directors wrote to the state department of banking at Lansing for information relative to the banking laws of Michigan. This group studied the pamphlet that was sent and reported its findings to the class.

The pupils were permitted to give promissory notes in payment for their shares of stock, putting up real estate in the city of Mathville as security. The pupils also were permitted to open checking accounts and savings accounts and were encouraged to use regular bank forms for such transactions. These bank forms were prepared and run off on the duplicating machine in the office. Certificates of stock, bank pass books, check books, promissory notes and even currency were prepared.

Meetings of the board of directors were held regularly, according to the state law, and policies of the bank were handled in a businesslike manner. The pupils were impressed with the fact that owning a share of common stock entitled them to a vote in the running of the bank. This proved to be an incentive for them to own as much stock as they could.

The city planning board was composed of a group of pupils interested in drawing. Regular meetings of this group resulted in a plan for a model city the main features of which were as follows: (1) a central business district planned for a community of about 50,000; (2) surrounding the business district, a wide park area about half a mile in width in which were located public schools, public libraries, churches, a museum, a zoo and recreational facilities; (3) beyond this, residential districts with community centers for grocery stores, drug stores and the like, and (4) farther out, factories, golf clubs, truck farms and a lake.

Several realtors bought up sections of property and organized groups to sell building sites to the citizens of Mathville. The planning board showed a great deal of originality and took pride in its work, drawing a large plan of the town from small drawings made to a scale of $\frac{1}{8}$ inch to 100 feet. Streets and boulevards were named suitably, as Division, Tangent and Multiplication.

A group of boys interested in stocks and bonds decided to enter the brokerage business. Daily market reports were posted on the bulletin board by this group and transactions were carried out as in a real brokerage office. To make the office appear more like a regular broker's office, ticker tape was provided by one of the members. Nearly everyone became interested in following the activities of certain stocks and graphs of their fluctuations were kept to help pupils select their investments. One of the most important depart-

ments of the town of Mathville was the tax department. This group estimated the expenses of running the city government and schools for the year and appraised the property of the city and levied taxes according to the findings. State and county taxes were included at the prevailing rate in the community.

A newspaper was edited and published by two of the boys. This appeared weekly and included not only the news of the activities of Mathville but also a classified section in which the community firms advertised their services.

Toward the end of the semester auditors were appointed to check the accounts of the bank and their findings were reported to the class. Several pupils that had neglected to take care of their promissory notes were sued by the bank. The trial ended the activities of the semester and preparation for it kept the enthusiasm of the pupils alive to the last day. A bank pay-off day was held when all accounts with the bank were closed. Thus the end of a profitable semester came.

The enthusiasm and cooperation of the pupils in the development of the project helped them as individuals to appreciate the complexity of business problems and gave them a greater appreciation of the value of the work studied. Judging by the number of questions that the pupils asked, their interest never lagged. As a class they were eager to contribute toward the success of the work in every way possible.

During the open house at which the work was exhibited parents expressed their interest in the project by commenting favorably upon their child's sudden interest in mathematics. Apparently they were well informed about Mathville and were just as eager to see the results as their children were to participate in the activity.

Not only did the development of this project accomplish the aims set up at the beginning, but it also helped to develop a spirit of cooperation among the pupils and it served as an excellent means of interesting the parents in the activities of the classroom. This type of activity is the best kind of guidance that it is possible to provide.

Spirited School Assemblies

LELAND B. JACOBS

IN SCHOOL assemblies that are intended to foster school spirit, too often the appeals are obviously trite and emotional. Few assemblies of this type aim definitely to clarify the school's program and to create an intelligent desire on the part of the student body to make this program function adequately.

Lincoln Consolidated Training School of the Michigan State Normal College uses the assembly program in an attempt to enlighten pupils concerning the school's program and to develop a school spirit based on intelligent understanding. Wide pupil participation is encouraged in an effort to have school morale emanate from the student body itself.

At the first assembly of each school year a portion of the program is devoted to introductions. The incoming seventh grade is presented as a class to the student body and receives a hearty welcome into the high school by a senior pupil. A representative of the seventh grade responds to this greeting.

New teachers are presented to the student body. The pupils who introduce the new teachers have interviewed them previously regarding their previous teaching experience, their education, their hobbies and the classes they will teach.

Installation of student council officers is another assembly always interesting to the student body. At this program the year's officers and council members are installed in the offices to which they had been elected by the student body the previous spring. The installation is carried on in simple dignity, the new officers receiving from the hand of the installing officer the symbols of their offices: gavels for the president and vice president; record books for the secretary and treasurer.

This assembly does much to maintain the prestige of the student council in the eyes of the pupils and gives the entire high school a preview of the activities of the student council.

Another type of assembly program successfully presented at the Lincoln

Consolidated High School carries out the general theme of "Planning This Year for Lincoln." At this assembly the general plans of various departments and committees are made known. The athletic program for boys and girls is presented. The general plans of the assembly committee are discussed. Problems of transportation of pupils are presented by the bus officers. The social committee tells of its program of parties and dances for the semester. Student council representatives give explicit information concerning proposed projects. The principal describes some of the administrative plans for the school year.

Another type of assembly program is used advantageously for the promotion of school understanding following a visit by a group of pupils to a neighboring school. This assembly is held the morning following the visit and consists of individual reports and panel discussions. Suggestions received from the visit are given, co-curricular activities and methods of organization are compared and plans are outlined for putting into effect ideas gained from the visit. Although informal in its organization, this assembly program stimulates pupil interest in school affairs and spurs the enthusiasm of the student body for school activities.

A fifth type of program which is used successfully year after year in building school understanding is the assembly that comes whole cloth out of the classroom. At these programs the pupils demonstrate their uses of classroom materials. These programs are enthusiastically prepared by the classes and are eagerly received by the entire assembly. They represent a type of incidental learning and a broadening understanding of the various departments of the school that are beneficial both as learning and as guidance. These programs probably represent the apex of the assembly programs given in the school.

In this manner, Lincoln Consolidated Training School attempts to cultivate an intelligent school spirit.

Evaluating Pupil Activities

KENNETH W. EELLS

IN THE November issue the general plan and procedures of the Cooperative Study of Secondary School Standards were described, and in the December issue some findings in regard to secondary school curriculums and courses of study were presented. In the second of these articles a distinction was made between "curriculum" and "courses of study":

"The curriculum may be defined as all the experiences that pupils have while under the direction of the school; thus defined, it includes both classroom and extraclassroom activities, work as well as play. . . . Courses of study may be defined as that part of the curriculum which is organized for classroom use."

Such a concept suggests that there are areas of the curriculum other than the formally organized courses of study. One of the most important of these is the pupil activity program.

The executive and general committees of the Cooperative Study have adopted the following statement of important guiding principles in this field:

"Since the curriculum comprises all the experiences that pupils have

while under the direction of the school, there can be no rigid dividing line, educationally, between the usual classroom activities and these activities sometimes called 'extracurricular activities' which commonly permit more freedom and are more largely initiated and directed by the pupils themselves. There is need for pupil participation and expression in experiences which are more essentially like out-of-school and daily life experiences than are the usual classroom procedures. The pupil activity program should aim to develop desirable social traits and behavior patterns in an environment favorable to their growth and, in general character, so similar to life outside the classroom that a maximum carry-over may be expected. Under competent guidance pupils should share responsibility for the selection, organization and evaluation of such activities and of their probable outcomes. In all such activities the development of

leadership ability in pupils should be one objective. Opportunities for exercising leadership should, therefore, be abundantly provided."

The foregoing statement stresses two things: (1) the function of pupil activities as an integral part of the curriculum and (2) the importance of pupil participation in the control and evaluation of pupil activities.

In an effort to produce a reasonably reliable and adequate measuring stick for evaluating the pupil activity program in any secondary school, the Cooperative Study has developed a total of 79 check list items and 30 evaluations based upon them. The check list items are brief statements of features or situations that usually characterize a good pupil activity program, while the evaluations are questions to be answered by the school itself and the answers verified or modified by an outside visiting committee, as to the adequacy and effectiveness of various aspects of the program in the light of the check list items.

This material is classified under the following headings: (1) general

Fig. 1—Sample page of check list items filled out for one school.

IV. The School Assembly

CHECKLIST

- (+) 1. School assembly programs are in large part given by pupils and by pupil organizations with pupils presiding
- (0) 2. Assembly programs are planned so as to secure participation and contributions of many, not simply of the few
- (-) 3. Assembly programs have definite entertainment, instructional, cultural, and inspirational values
- (+) 4. Assembly programs are free from coarse and objectionable elements
- (+) 5. Assembly programs are characterized by a variety of presentation, such as music, speaking, dramatization, demonstration, and exhibits

- (-) 6. Assembly programs stimulate the creative ability of pupils by encouraging them to write and produce plays or other performances, design scenery and costumes, devise unusual exhibitions and entertainments, etc.

- (0) 7. Correct audience habits are developed—no late-comers or early-leavers, reasonable applause, courteous attention to performers; no disturbances

- () 8.
- () 9.

Number of school assemblies per year 15
Length of assembly period 30 min.

EVALUATIONS

- (4) w. How adequate are the provisions for attaining conditions or results such as the above?
- (3) x. How effectively are these conditions or results attained?
- (2) y. How actively and extensively do pupils participate in the presentation of programs?
- (3) z. Evaluate the quality of four successive assembly programs.

Comments:

nature and organization; (2) pupil participation in school government; (3) homerooms; (4) the school assembly; (5) school clubs; (6) school publications; (7) physical activities, and (8) finances of pupil activities.

A sample section of the criteria, as now revised, showing the check list items and the evaluations for "The School Assembly," as filled out for a particular school, is shown in figure 1. In the check list, the plus sign indicates that the condition or provision is present or made to a satisfactory degree; the minus sign, that the condition or provision is present to some extent or only fairly well made, and the zero, that the condition or provision is not present or is not satisfactory. In the evaluations, the rat-

other sections of the evaluative criteria, was the best found among the 200 schools. A graphic presentation of the relative standing of the various elements of this school's pupil activity program is found in figure 2. The left side of each "thermometer" is a percentile scale. In all except one feature this school is better than 95 per cent of the schools studied and in three of the eight it is the best. But even in this superior school there is room for improvement, particularly in the field of pupil participation in school government. In this connection, a member of the staff of the school comments: "Neither pupils nor teachers are greatly interested in self-government as such. The attempt is to obtain and develop a co-

up to that for other small schools (as indicated by the "S" at the 41 percentile point). Here is a school whose pupil activity program as a whole is almost nonexistent and yet one that may find some stimulus in the fact that it is near a normal position in one field.

That the school is not unaware of its inadequacies is indicated by some comments by the principal on various sections of the pupil activity program: "Our pupil activity program is sadly neglected." "We have no student government." "Our school clubs are just commencing to organize." "Physical activities are neglected." "After September 1937, we hope to develop a somewhat comprehensive pupil activity program."

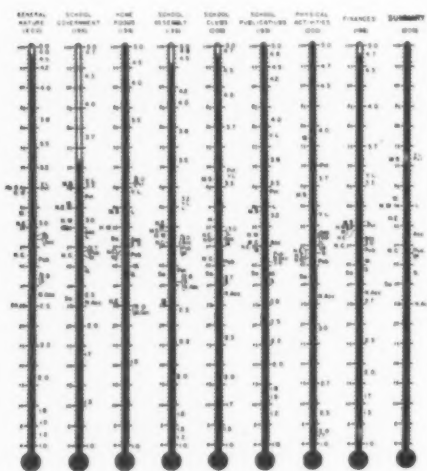


Fig. 2—Temperature for School A.

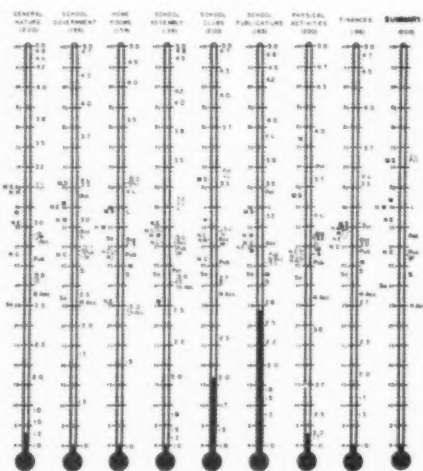


Fig. 3—Temperature for School B.

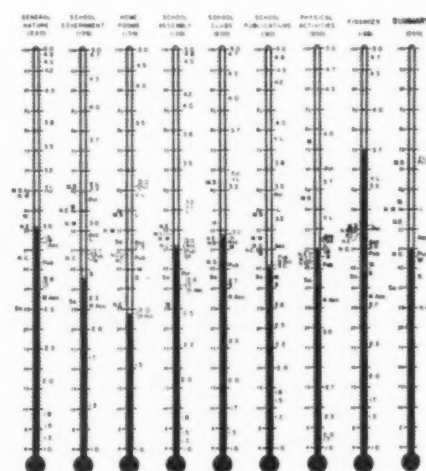


Fig. 4—Temperature for School C.

ings are on a five point scale, as follows: 5, highly satisfactory or practically perfect; 4, very good; 3, average; 2, poor, and 1, very poor.

Using this material, the pupil activity programs of 200 representative secondary schools were studied and evaluated during 1936-37.

The pupil activity programs of six schools, described briefly below, have been selected so that one is found in each of the six regional associations of colleges and secondary schools.

School A: The first school is an accredited public school with an enrollment of more than 3000 pupils and a staff of more than 125. It is located in a large urban center. Its pupil activity program, as measured by the means already described, was the best among the 200 schools studied. More than that, its entire school program, as measured by the

operative participation. To date, the faculty plays a rather large part in supervision and control." Of the 21 evaluations, 13 were left unchanged by the visiting committee, 4 were lowered and 4 were raised.

School B: In dramatic contrast to the school described above is the one presented in figure 3. This school had the poorest pupil activity program of any of the 200 schools studied. It is a small public school with less than 200 pupils. It is accredited by a regional association, although many of the nonaccredited schools were found to be better than this one.

A glance at the chart shows only two thermometers that indicate any appreciable achievement, those for school clubs and school publications. In the latter case, the school's rank (at the 34 percentile point) is nearly

School C: The two foregoing schools are the extremes. School C is more nearly typical. Its pupil activity program is the median one of the 200 schools studied. On the basis of its total score on all sections of the evaluative criteria it is near average, ranking at the 51 percentile. It is a public school with about 225 pupils and 10 teachers. It is accredited by its regional association.

Although there is some variation in the ranking of this school on the various sections, as indicated by the different thermometers in figure 4, the profile is not as ragged as those for most of the 200 schools. Since this school is not far from the national average (50 percentile) on most of the thermometers, it will be well to compare its standing with norms of comparable schools.

Since this school's enrollment is

between 200 and 500, how does it compare with other schools in this range? The norms for such schools are indicated on the right side of each thermometer by the letter "M" (medium). In four cases (not including the summary) this school exceeds the norm for other schools of its own size; in two cases it is exactly at the norm, and in two cases it is below this norm. Similarly, this school, being an accredited public school, can compare itself with the norms for other accredited schools ("Acc." on the right side of the thermometer) and with other public schools ("Pub." on the right side). The norms on the left side of the thermometer are for schools classified by the various regional associations.

schools, but this is not true for each individual school. School D is a non-accredited school that ranks well above the average for the accredited schools in its pupil activity program as well as in most of the other sections of the evaluative criteria. Its total score on the evaluative criteria places this school at the 67 percentile. It is a large public school having more than 2500 pupils and nearly 100 teachers.

Figure 5 shows at once that in five of the eight thermometers this school is above the 75 percentile point. In two it is exactly at the norm for accredited schools and in only one, "finances," it is noticeably deficient.

School E: The next school is a privately controlled boys' boarding

trolled system of handling pupil activity accounts, whereas the criteria evaluations are in terms of the extent of pupil participation in the responsibility for the handling of these accounts and of the extent and adequacy of the supervision of such pupil participation.

School F: The last school is a Catholic girls' boarding school with less than 100 pupils and 10 members of the staff. Figure 7 shows the rankings for this school. Its school assemblies and homeroom provisions are outstanding, but its clubs, physical activities and finances are somewhat inferior.

These methods suggest much for a thoughtful reviewing committee of an accrediting agency or for the ad-

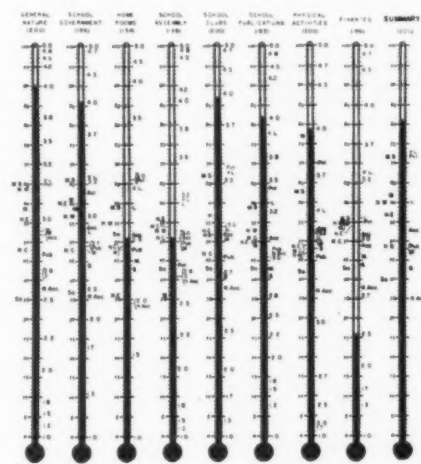


Fig. 5—Temperature for School D.

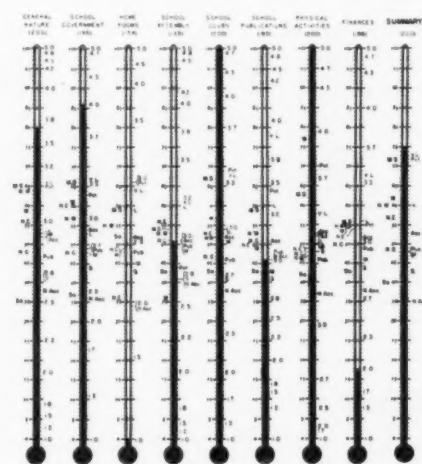


Fig. 6—Temperature for School E.

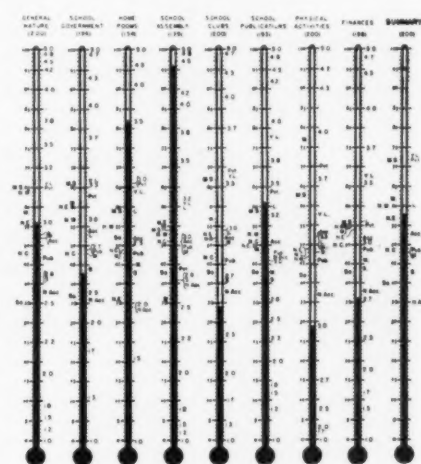


Fig. 7—Temperature for School F.

In summary, figure 4 presents a picture of an average school, in which pupil activity finances are distinctly above average, equal to or better than those of 75 per cent of the schools studied, but in which homeroom provisions are down to the level found in the average non-accredited school. Its school government program is about equal to that found in small schools (less than 200 pupils) but distinctly poorer than that usually found in other schools of its own size. In the other elements of the pupil activity program it is not far from average.

School D: Of the 200 schools studied, 175 were accredited by their regional associations, while 25 were not thus recognized. In general, these 25 nonaccredited schools average distinctly lower in nearly every measure than do the 175 accredited

school with less than 100 pupils and twelve staff members. It is prevalently a college preparatory school. The school as a whole is about average, but the pupil activity program is decidedly above average, as indicated by figure 6. This school's profile is perhaps most noticeably characterized by its extreme raggedness. Although the weighted average, which is plotted as the summary, shows a ranking at the 75 percentile this does not mean much when composed of one zero, two 100's and five others scattered from 18 to 86.

The homeroom services are evaluated as completely inadequate, despite the fact that the criteria state that in boarding schools dormitories may often serve the purposes of the homeroom. The low ranking under "finances" is due to the fact that this school has a completely faculty con-

ministrator of a school. The complex unit that is a modern school is broken down into numerous component parts, evaluated in comparison with other schools on a flexible basis, taking into account the philosophy and objectives of the school and the needs of the pupils and community that it serves, and the result portrayed in a graphic form so that it is easily analyzed and easily interpreted.

The graphic thermometers do not tell the whole story as to what is wrong with the school any more than a clinical thermometer tells what is wrong with a doctor's patient. They suggest points for further study and attention. Low "educational temperatures" suggest needed improvements; high "temperatures" suggest special recognition for good work done.

Chalk Dust

FLASH! The old I.Q. is taking it on the chin again. The laddie who has handed this stiff jolt is none other than George Dinsmore Stoddard, University of Iowa's well-known psychologizer. Speaking in New York, Doctor Stoddard is reported (reported, mind you) to have said that an individual's I.Q. can be changed, that not-so-bright parents are as likely to be the proud ancestors of little Oscar, the wonder child, as are bright parents.

What a wonderful era for education,
What a definite boon for the world and the nation,

A hey-day of talk and elucidation,
A slap at the scoffers of predestination,
When Mr. Simon and Mr. Binet
Stepped forward to say,
What's new?

The I.Q.
Inferior complexes withered away
Thus boldly exposed to the light of the day.
Schoolmasters at last
Had something to grasp,

To wondering parents, quite glibly they'd say:
Don't worry if Johnnie can't read, spell or write,

Our standardized tests show he isn't so bright.
Now it isn't you,
It's his dad-blamed I.Q.

And there is nothing—well, practically nothing—to do.

Now the news
Of I.Q.'s

Is again in the land.

They are up

They are down

They are damned! They are grand!

Most schoolmasters think they are still stationary,

But Stoddard (not Alex) says: "Inflationary!"

And, lo! the poor schoolmaster looks with dismay,

As he views

His I.Q.'s

He has little to say.

GIVE thought, then, to the Truant Officer, that picker-upper and bringer-inner of unwilling moppets, that conveyor of virile and fiery messages from the superintendent of schools to erring parents, the

butt of cartoonists, the bugbear of early spring wanderers, the bogey man of circus days.

A changing civilization has swept over him. His duties of a former day grow less and less until they are well-nigh fallen completely away. He has been given new and awesome titles and high dignities have been heaped upon him. He sits in convention with the learned ones and has a section of his own wherein he mingles with his fellows. He is enrolled in the class on child psychology.

But, withal, he has kept his dignity and his usefulness. Can we all say as much in the face of a dynamic world?

MANY an educationist expressed surprise and indignation when Charlie McCarthy was awarded an honorary degree by one of our great institutions of learning last June.

"It isn't the first time that a dummy got an honorary degree," says Sourpuss, "and it probably won't be the last."

IN ALL reverence, let this be our evening prayer:

Oh, Master Teacher, thou knowest my uprisings and downsittings. I have left undone those things which I ought to have done and I have done those things which I ought not to have done.

Thou knowest that I have been strong for my own dignity and weak in my insistence on clear and shining halls; thou knowest that I left that new little teacher to sink or swim and, when she sank, I rubbed my hands piously and said, "Twas the fault of Teachers College."

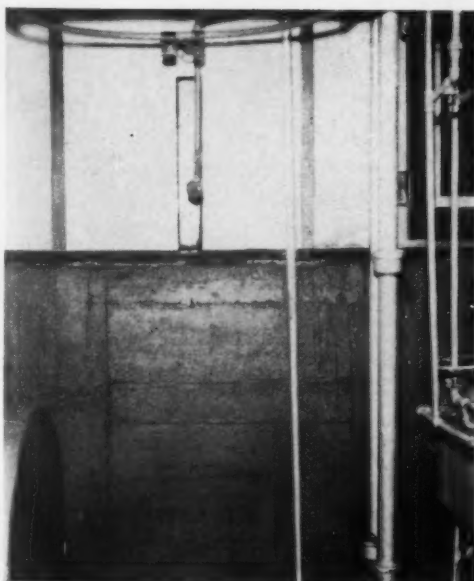
Teach me to be a little more patient, a little more understanding with my young people, a little less pompous with my public and a little less pedantic with my board of education.

These things I ask that I may be worthy of the great profession to which I have been called. *Amen.*



BETTER WASHROOMS

Old



Modern



NOT all school administrators have given the thought to sanitary facilities that the subject deserves. Knowledge about the hygiene of water closets, wash bowls, drinking fountains, shower baths, swimming pools has been revised. What was thought to be safe and sanitary in 1920 or 1930 or, even, 1935 is now questioned or condemned.

Enough has been discovered about supposedly safe plumbing fixtures to make every school administrator uneasy until he has checked on the possibility of cross-connections and back-siphonage. He needs expert assurance that the school plumbing installation is foolproof against the spread of disease.

This is only half the story. The other half is cleanliness. It is preached from nursery school through high school, but how often with little provision on the premises for practice! Habits of cleanliness cannot be formed when the school makes it inconvenient or actually difficult to keep clean.

To stimulate school administrators to thought and action, this Better Washrooms Section is presented. Throughout the new year specific articles on improved sanitary facilities will be published.

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From a County Superintendent

IN THE matter of school economy (in the literal sense of the word "economy"), clean hands may be considered as important as a pure heart.

At any rate, clean hands are indispensable, in view of the ready contacts that a child tends to make between his hands and his mouth.

There ought to be a law that any board of education which does not furnish proper wash-room facilities should be sentenced to the mud pie business for from one to ten years and compelled to eat the product.

M. J. LOWERY,
New Brunswick, N. J.

From the Office of Education

PROBABLY no unit in the school building needs modernizing so much as the wash-room. When it is remembered that 39 per cent of the school buildings are more than 30 years old and that modern standards of school hygiene are of much more recent date, it is obvious that there is vast room for improvement in the construction and equipment of washrooms. Thousands of rural schools do not have any washrooms or even running water in the building. Thousands of city schools do not have warm water or towels in the washrooms. This deplorable condition should be improved.

ALICE BARROWS,
Washington, D. C.

From a School Principal

IT IS going to take a lot of teaching before the cleanliness habit takes hold. In the meantime we have to push it along so as to prevent the illnesses that threaten school children.

Children go to recess, play madly for twenty minutes, fall on the playground, go to the toilet, and at the signal go back to class. Yet the school must guard its children's health and the teacher must present clean work to supervisors.

There is plenty of water in the world, and soap. Paper towels are not prohibitive. The great cost is in building washrooms and manning them. Measured against the children's present discomfort and the threat to their health, isn't it very small?

ANGELO PATRI,
P.S. 45, New York City

Curricular Neglect—

WHAT have washrooms, toilets and shower and locker rooms to do with the curriculum?

The answer is: **EVERYTHING.**

Excellent work has been accomplished within recent years in curriculum revision. For the first time some of these schoolmen appear to have caught the view of much wider horizons—something beyond the four walls of the conventional classroom and the pages of a conventional textbook. Curriculum monographs, particularly those by progressivists, emphasize the importance of the educational environment as a totality.

In environmental studies are included community and school. The value of beauty in the building itself and in the setting is given sensible recognition. However, we have looked in vain in these instructional specifications for definite recommendations concerning the details of school plant sanitation.

It is reasonable to expect that the divisions of health and physical education would emphasize the need for sufficient washrooms, toilets and locker and shower rooms as the laboratories through which habits of personal hygiene can be practiced as a matter of routine. However, the curriculum makers are silent on these points, either because of Victorian prudishness or because physical facilities are beyond their horizon.

Are American public school buildings now well provided with respect to sanitation?

Immediately we may omit more than 100,000 one room schools that have either the most primitive sanitation or else lack even the semblance of washrooms.

In general, urban elementary and secondary schools more than 15 years old offer the most striking contrast between the teaching and the practice of hygiene. Toilets there are, usually in sufficient numbers, but of a quality that belongs to an age when good plumbing and good fixtures were a luxury instead of a reasonable accessory. In these buildings washroom facilities are inadequately provided. Even when present the hot water faucet was either never installed or never actually connected to hot water service.

Sometimes there are soap containers but more frequently these have been omitted. The average soap container seldom betrays evidence of contact with soap. Yet soap is so cheap in this country that it cannot be classed as a luxury. To the practical hygienist soap is just as essential as a textbook on the possible uses of soap. Paper towels are more frequently met with than soap. Shower rooms and locker rooms are often poorly located with respect to sunlight and are frequently of a quality, both in installation and management, that indicates their presence, through the nostrils.

During the past year we have examined hundreds of plans for new school buildings. In these the educa-

An Editorial on School Washrooms

tional designer and the architect have made much better provision for the essential washrooms, toilets, showers and locker rooms. Where the specifications have been carried out in construction, these structures are well equipped, with the exception of hot water in washrooms; washing facilities in shops, laboratories and art studios, and drinking fountains and expectorators in the gymnasium. Of the hundreds of plans studied only one, the Arthur Hill High School in Saginaw, Mich., has provided enough washing space immediately adjacent to the cafeteria so that clean hands are mandatory before eating the noon lunch! While new plans show improvement, they do not yet provide extensive or diversified washroom facilities.

The older buildings are a sad commentary on the hygienic aspect of American education. These structures probably will serve the community for from twenty to fifty years to come. Each year the building odor grows in richness and intensity until the educator has actually given to it the specific classification of "school smell."

We accept the statement that the totality of educational environment plays a large part in the successful education of our children. We also maintain that the sanitation of the school building is a most essential part of this environment. The schools are confronted with a specific need and a specific condition.

More serious attention to the entire problems of sanitation can be given to plans for new buildings. This emphasis must come from the educator. Always confronted by the problem of rigid economy, the architect cannot be expected to extend himself in this direction without specific demand. The good architect and engineer are willing to point out these needs but they must have support from the professional in teaching and administration to obtain the facilities needed.

Existing buildings may be greatly improved. The first step is to make a sanitary survey of requirements to bring these buildings to modern standards both through renovation and enlargement. The cost of these changes may be easily ascertained. It is then possible to plan ahead for several years, including in each annual budget as much money as possible to improve the worst conditions. If an orderly procedure is planned, it will be possible within a five year period to bring urban school sanitation to a high efficiency.

The practice of hygiene is as essential as the teaching of hygiene. Teaching with the neglect of practice is an inefficient procedure, representing possible waste of money. We recommend school washrooms as an area for serious consideration to those engaged in curriculum revision.

ARTHUR B. MOEHLMAN

From a State Superintendent

ACCENT upon better school washrooms does not come too soon. No educational program can be called adequate that neglects to recognize the vital importance of this area in its physical setup. Bad washroom conditions may do more than offend good taste. They may also neutralize classroom emphasis upon health, sanitation, safety, civic and cultural values. They are inexcusable. Much can and should be done in many of the older buildings, both large and small, to improve the facilities for school children through the modernization of old plumbing and equipment, addition and use of sanitary supplies, and insistence upon cleanliness and orderliness. Of course, all new buildings should conform to proper requirements.

AGNES SAMUELSON,
Des Moines, Iowa

From a Research Commissioner

I SHOULD like to present my views of the need for adequate washroom facilities in terms of two quotations from "A Guide to the Teaching of Health in Elementary Schools" by Florence C. O'Neill, supervisor of health teaching, State Education Department.

"A mirror, a clean lavatory, warm water, paper towels, soap, and an opportunity to use them when the hands are dirty are the most effective methods of getting children to enjoy the sensation of being clean."

In a check list to be used by the teacher in studying the physical environment of her school, Miss O'Neill asks with special reference to cleanliness:

"Are warm water, soap and individual paper towels available in sufficient quantity for hand-washing?"

"Are lavatories or wash bowls available and placed at a proper height for the use of all children (a height of 26 inches for the youngest and 30 inches for the oldest children)?"

"Are ways and means used to permit children to wash hands under running water?"

"Are all fixtures kept clean?"

"Are the children encouraged to feel responsible for cleanliness of wash bowls? (Janitors should clean thoroughly once a day or more often if necessary.)"

"Is opportunity provided for all children to wash the hands when necessary and always after using the toilet and before eating?"

J. CAYCE MORRISON,
Albany, N. Y.

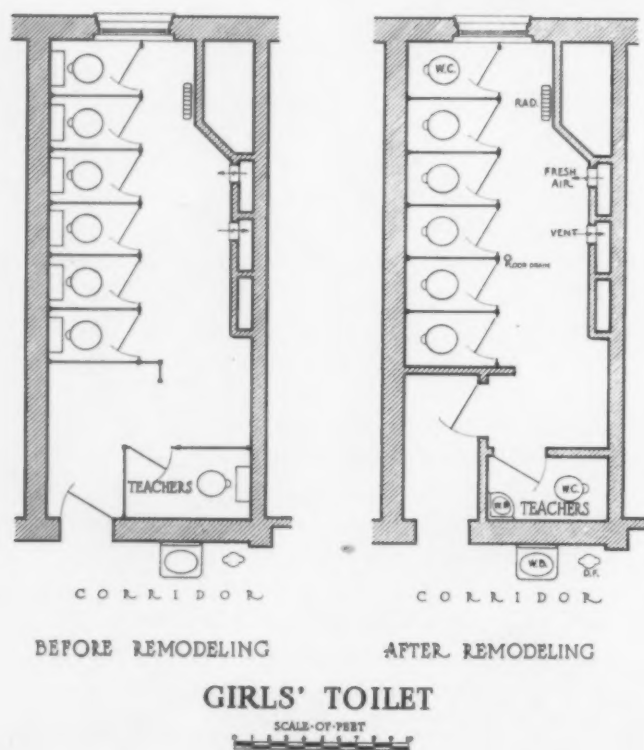
Washrooms and

FRANCIS R.

MECHANICAL services in a school plant generally wear out or become obsolete at least once during the life span of the building. This is especially true of plumbing, since its presence in any but first-class condition offends the senses of both sight and smell and makes the need for improvements imperative in order to safeguard health and to rid the school plant of the typical "toilet room odor."

Sanitary codes have been in effect in most areas for a long period of time. Much of the plumbing work in older school buildings, therefore, conforms to the requirements of earlier codes. Sanitary codes have been revised and expanded so that additional safeguards are afforded in present day installations over those of three decades ago. When it is possible to finance plant modernization or when such alterations can be done through the relief agencies, one of the items that will contribute most toward improved housing is modernization of sanitary facilities.

The extent of modernization will depend largely upon existing conditions and availability of funds. There may be installations in which only new fixtures need be provided, while in others more extensive operations



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will be found desirable. Conditions will vary with the quality of the design and construction used in the original installation, but it is reasonable to expect that toilet rooms, particularly for boys, erected prior to 1910 may need modernizing in all four divisions: water supply, drainage, fixtures, floor and partitions.

The sizes of water supply mains and branches may have been ample at the time of the original installation. With the passing of the years, however, pipes no longer can carry the same quantity of water because of internal corrosion or clogged interiors. At the same time, additional demands have been made on the water main in the vicinity of the school, thus causing a reduction in pressure. In maintenance work it is frequently found that hot water lines have become filled with rust and scale and only a small portion

School Health

SCHERER

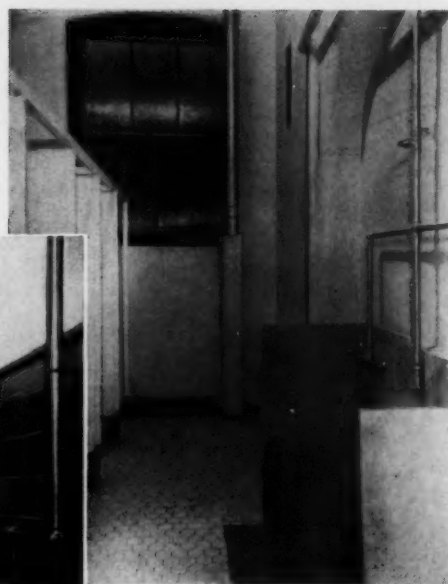


AFTER REMODELING

of the original area remains effective. Lack of pressure or volume in the water system is more than an inconvenience. It becomes a definite hazard since it directly affects the proper flushing of the water closets and urinals and makes for inadequate streams at the drinking fountains.

In the scheme to modernize the toilet room, therefore, full consideration should be given to the need for the enlargement of the water line from the source of supply into the school building. In general, cast iron pipe, bell and spigot connections with calked joints have been found most satisfactory for connections from water mains to the school building.

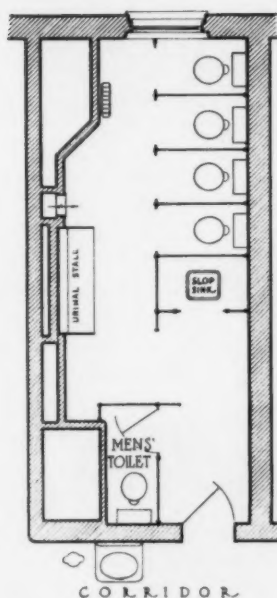
Experience has shown the economy in using brass pipe or copper tubing for hot water service throughout the building. When funds are not too limited, it would be advisable to make the entire cold water installa-



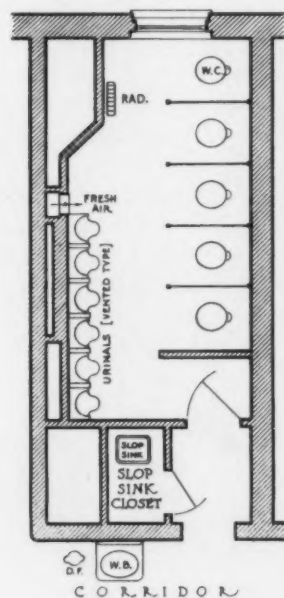
BEFORE REMODELING

Above: Boys' toilet room built in 1910, showing old style urinal and wooden partitions. The high flush tanks do not show in the picture. Left: Remodeled toilet, equipped with nine urinal stalls and five water closets. Partitions are of steel with enamel finish. Marble partitions are excellent but the cost usually is a factor. Glass in metal frames has given satisfaction. Porcelain enamel is a popular choice.

BOYS' TOILETS



BEFORE REMODELING



AFTER REMODELING

BOYS' TOILET

SCALE OF FEET

tion of brass or copper, but in any event it will be a real economy to install all concealed cold water lines of brass or copper.

Brass pipe is available in several qualities, the best of these being known as "red brass" and containing 85 per cent copper and 15 per cent zinc. Since this withstands corrosive conditions best, it seems wise to pay the slight additional cost for it in preference to any of the other grades of brass pipe. Copper tubing can best be used in concealed spaces but, if it is run exposed, it must be secured to withstand the actions of pupils pulling and hanging upon it.

In making installations of new piping unusual precautions must be taken to prevent any cross-connections between plumbing fixtures and water supply in order to guard against contamination of the water. Safeguards can be set up by proper piping arrangement or by the use of vacuum breakers.

Most plumbing codes today require the use of extra heavy cast iron soil pipe. Whether the code having jurisdiction requires the use of the double thick pipe or not, it is recommended that this be used since the slightly higher cost is justified on the basis of freedom from cracking during installation, building settlements or minor freeze-ups.

A marked improvement has been made in water closets. Majority opinion favors the use of siphon-jet bowls, yet there are others who believe that the wash-down type is entirely satisfactory. The latter is less costly than the siphon-jet type.

If siphon-jet bowls are used, care should be taken that the waterway is not less than $2\frac{3}{8}$ inches. When the wash-down type is used, the waterway should be not less than $2\frac{1}{2}$ inches. In general, bowls should be of vitreous china and of the extended lip or elongated rim type. Manufacturers are now willing to produce juvenile sizes, which makes it unnecessary to equip schools with fixtures of adult size.

In no school installation should the water closets, except those for administrative, teacher or janitorial use, measure more than 13 inches from the floor to the top of the rim. Wooden seats have proved impracticable and require an undue amount

of repair and upkeep. Open front seats, without covers, of an impervious material are durable and will meet with the approval of the local medical and health authorities. A few years ago this item was closely controlled by a relatively few manufacturers, but today with the rapid advance in the development of plastics many such seats are on the market.

Water supply to closet bowls will be by one of two methods. The first of these is direct connection to the water main, with operation by means of a lift type of flushometer valve. Satisfactory operation requires that the water pressure be not less than 40 pounds at the valve. Flushometer valves that depend upon seat action for automatic flushing have disadvantages that weigh heavily against their one advantage, positive flushing of the bowl.

The second method is the use of flushing tanks. Arrangement can be made for water from these to discharge automatically or by tripping a lever.

The best urinals installed in schools twenty to thirty years ago were of stall construction with the bottom about level with the floor of the toilet room and with the backs rising to a height of from $3\frac{1}{2}$ to 4 feet. They were made of marble, slate or soapstone and were flushed intermittently and automatically by means of a tank and a perforated pipe along the top of the urinal for the distribution of the water. The best installations were vented between the floor and the back slab, thus affording room ventilation as well, a positive movement of air being created by means of aspirating coils or an exhaust fan.

Seldom are older toilet rooms free from odors. The materials of which the urinals were made have absorption properties and, in addition to this source, the joints of the materials, the corners and the underneath parts of the back slab, all are difficult to keep clean. Even with the best of housekeeping there is not too much that can be done to rid the building of odors, although these may be partially masked by chemicals which provide a pungent odor that offsets the toilet room odor. For some persons there is little choice between two objectionable odors.

The practice today is to install vitreous china stall type urinals, several in a row, equipped with automatic flushing devices. While some schools prefer to mount the urinals one step above the toilet room floor, others pitch the floor to the urinals, thus permitting drainage from the floor through the urinals. Both methods have been found satisfactory.

Wash basins of earlier construction frequently consist of a marble slab and back piece and a porcelain bowl. These assembled units provide joints which, with the passing of time, become insanitary. Today wash basins are available that have integral aprons and backs. Vitreous china has first choice where the initial higher cost can be met. Enameled iron also is used extensively.

General practice is to equip each wash basin with hot and cold water, supplied through a combination fitting that permits tempering the hot water to prevent scalding. Some large school systems make no provision for plugging or stopping off the waste. This means that the children wash in a single stream of tempered water which wastes as it strikes the basin. The results are satisfactory as measured in terms of cleanliness, length of time spent at the basin and splashing and general soiling of basin and walls in the vicinity of the wash-up place.

The rim of the basin is usually set 25 inches from the floor in elementary schools and about 30 inches, in high schools. Some school systems place the wash basins in elementary schools in the corridor just outside toilet room doors for the twofold purpose of better supervision and reduction in the confusion and time spent in the toilet room. These are usually placed in a niche or recess to prevent interference with corridor traffic. In such installations, it is customary to have one or two drinking fountains placed near the wash basins.

The use of indexed china handles on wash basins and drinking fountains is not recommended since these are readily broken, thus adding to replacement costs. Until they are replaced they remain a source of danger. The use of indexed metal handles is recommended.

Considerable improvement has been made in drinking fountains during recent years, particularly in that they are now available in vitreous china, are provided with a sanitary type of nozzle having a protecting guard and have automatic regulation, which permits of a constant arc of stream within reasonable pressure variations on the water line.

It is recommended that at least one drinking fountain be provided for each hundred pupils located on each floor of the school. A height of about 28 inches from the floor to the rim of the fountain is satisfactory in elementary schools, a height of about 36 inches, in high schools. It is not recommended that a drinking fountain be installed in a toilet room.

Frequently the reconstruction in connection with toilet room modernization requires as much attention as the plumbing itself. The first question is one of location. If toilet rooms are located in the basement or if they are not available on each floor of the building, the question arises as to whether it would be to the best interests of the school to abandon existing toilet facilities entirely and to alter space in other areas of the building.

In many modernization jobs it is more satisfactory and just about as economical to tear out the existing floor and replace it with a structural slab of reinforced concrete. Floor drains can then be installed and finished floor of a porcelain type of ceramic mosaic tile or terrazzo laid to pitch to floor drains. If plaster sidewalls are in good repair, economy may dictate that these be left. If the sidewalls are not in good repair, however, an excellent job may be had by installing a wainscot of 1 inch veneer salt glazed brick or tile, terracotta or other impervious material.

If the sidewalls are to be entirely reconstructed, there is less difficulty, since the standards of present day construction can be followed. As a rule, these include the use of salt glazed brick, glazed tile or terracotta blocks. A sanitary cove base of impervious material is important since it makes for cleanliness in flushing down the toilet room floors. A good practice is to provide both a hot and a cold water hose bibb in the room so that the school custodian

may flush these floors at regular intervals.

For some time the trend has been away from high toilet partitions, the commonly accepted height being about 5 feet 6 inches above the floor. Marble still ranks high for quality installations because of its appearance, the ease with which it can be kept clean and the inability of pupils to deface it. Glass in metal frames has given satisfaction in some localities.

In more general use than any other, however, are the steel partitions with baked-on enamel finish. Frequently in remodeling work the existing wood partitions may be cut down in height and used again. Several years of experimental work in caring for wood and metal partitions in one large school system has shown that there is a decided advantage in having such partitions finished in white enamel. Instead of this resulting in a more liberal marking of



What's wrong with this picture? Better ask what is right, for the whole arrangement is outmoded.

areas by pupils, the glossy white surface acts as a deterrent. This is true in both elementary schools and high schools.

Adequate natural and artificial lighting should be provided in toilet rooms. Generally, each toilet room has a window of the same size as classroom windows. In no case should the glass area be less than one-twelfth that of the floor area. The switch controlling the electric lights should be at the entrance, in the area not dampened by the flushing-down process. A switch of the key-operated type will prevent mischievous turning on and off of the lights.

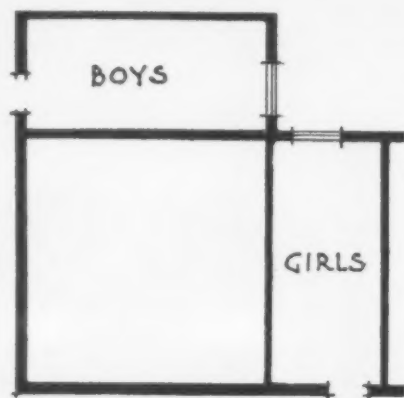
Provision should be made to exhaust the air from toilet rooms by mechanical means. This exhaust system should be entirely independent of the ventilating system for the remainder of the building, the discharge from the fans being kept away from windows and air intakes to supply fans. The mechanical exhaust system should be in operation each day the building is in use.

Housekeeping plays an important part in maintaining toilet rooms in perfect condition. The first need is an adequate supply of hot water. Proper brushes and cleaning materials should be supplied the janitorial force so that there can be no excuses on that score. School administrators should constantly supervise these areas for adequate daily cleaning. As plaster is absorbent, it is recommended that the ceiling and walls be kept painted. It is usually necessary to repaint these rooms every two years and occasionally touch-up painting is needed in the interim.

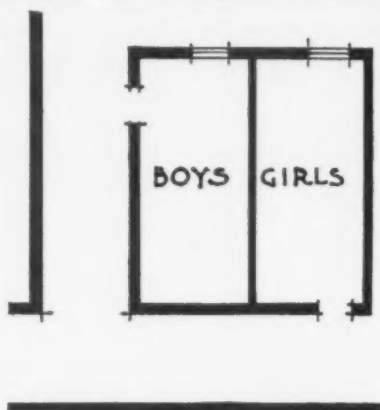
A fault in many of the older buildings is the absence of proper facilities for the cleaning force. When possible, such provisions should be made at the time of modernization of the toilet rooms by providing in that area a small janitorial room with impervious floor and wainscot. In this room, commonly known as a slop sink room, should be a slop sink and sufficient storage space for mops, brooms, cleaning supplies, towels and toilet paper.

Modernization of the toilet rooms in some of the older school buildings not yet ready for abandonment will make for a healthier and more wholesome atmosphere in the building.

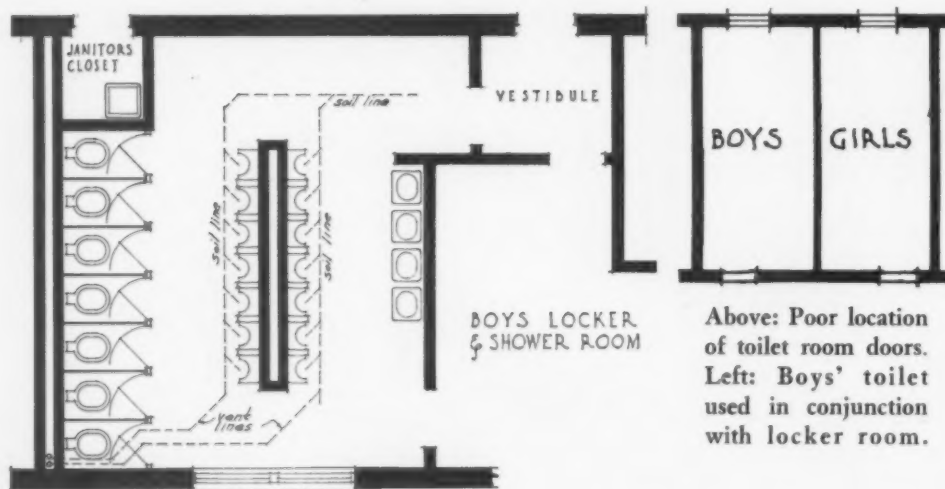
SUGGESTED LAYOUTS



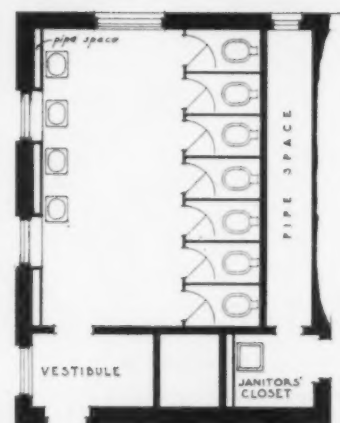
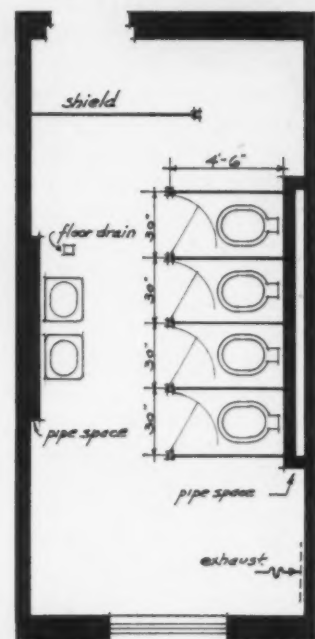
Poor location of washroom windows.



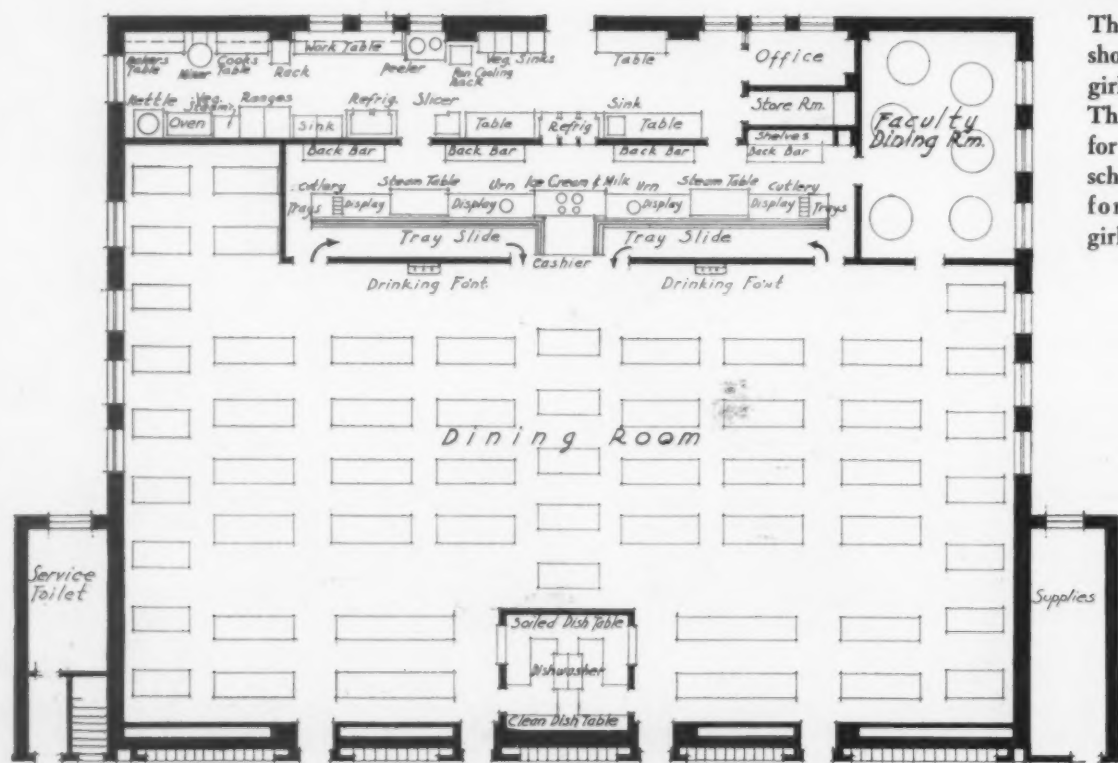
Good location of doors and windows.



Above: Poor location of toilet room doors.
Left: Boys' toilet used in conjunction with locker room.



The above diagrams show layouts of two girls' toilet rooms. The upper is planned for a small grade school; the lower, for a large city girls' high school.



Left: Drinking fountains are located just behind the tray slide in this cafeteria. At lower left note the washroom for employees.

Planned in Modern Manner

IRA H. DAVEY

IN PLANNING the new school building, the toilet facilities should be as carefully considered as classrooms or study halls. First, the location of these rooms in relation to other parts of the school is of prime importance and should be studied intelligently before any final decision is reached.

Next come the arrangement of the fixtures, the type of fixture, ventilation and lighting, both natural and artificial. All these factors should be given serious thought by the school administrator from the standpoint of their functional use as well as from the standpoint of construction and mechanical details.

Some common sense, with a few rules of sanitation, usually determines the location of the rooms. As it is not the purpose here to consider special toilet facilities as applied to the kindergarten, cafeteria and community use, the following simple rule applies: Toilet rooms designed for general use of pupils should be placed at as nearly a central point as possible. It should not be necessary for children to travel long distances to reach them.

Glass Bricks Afford Privacy

Other factors, too, enter into the planning. Toilet rooms should not be placed below grade. In fact, many states have laws prohibiting the placing of toilet rooms below ground. In no case should they be located where it is impossible to obtain window space equal to at least 20 per cent of the floor area. Glass bricks lend themselves admirably to solving this problem, affording maximum light and at the same time complete protection.

Washrooms for boys and girls should not be adjacent and in no case should the entrance doors be in full view of each other. If it is desired or necessary to group the plumbing, some arrangement should be devised for placing the doors to each room on separate corridors. In elementary school buildings particularly, toilet

doors should be kept as far as possible away from other doors.

Once the location has been decided upon, there are numerous details to be worked out. It is important that the toilet rooms be arranged so that it will not be possible to see into them when the corridor door is open. Adequate shields may be installed of the same type as the stalls.

Now we are ready to consider the size of the room. Much depends upon the individual plan. While the space should be adequate, it should not be so roomy as to attract group gatherings. Provision should be made for towel racks and waste paper or used towels; also for a vending machine in the girls' rooms.

It is here that habits are formed; the rooms, therefore, should be so arranged that these habits may be acquired naturally. Lavatories should be located near the door so that the pupil must pass them on the way out and thus be reminded to wash his hands. The boys' toilets should be so arranged that the urinals are reached before the water closets; otherwise pupils will be tempted to use the first fixture they see. The room should be constantly mopped, floor drains should be installed or the floor should be sloped into the urinals.

Now we are ready to calculate the number of fixtures that will be required. The following formula, the recommended standard adopted by the National Council on Schoolhouse Construction, has proved satisfactory, although in extremely large systems a more complex formula may be required:

Elementary Schools

Water closets, 1 for each 35 boys
Water closets, 1 for each 25 girls
Urinals, 1 for each 25 boys.

High Schools

Water closets, 1 for each 40 boys
Water closets, 1 for each 25 girls
Urinals, 1 for each 30 boys

Toilet rooms should be located on each floor.

It goes without saying that no fixtures should be used that are not of high standard. Cheap fixtures are poor economy; they always are a constant cause of trouble and, after a few attempts are made to fix them, they usually stay in poor condition. While practically all standard makes of fixtures, when properly installed by good mechanics, will last for many years, some types have advantage over others. Selection is largely a matter of opinion among architects and school administrators.

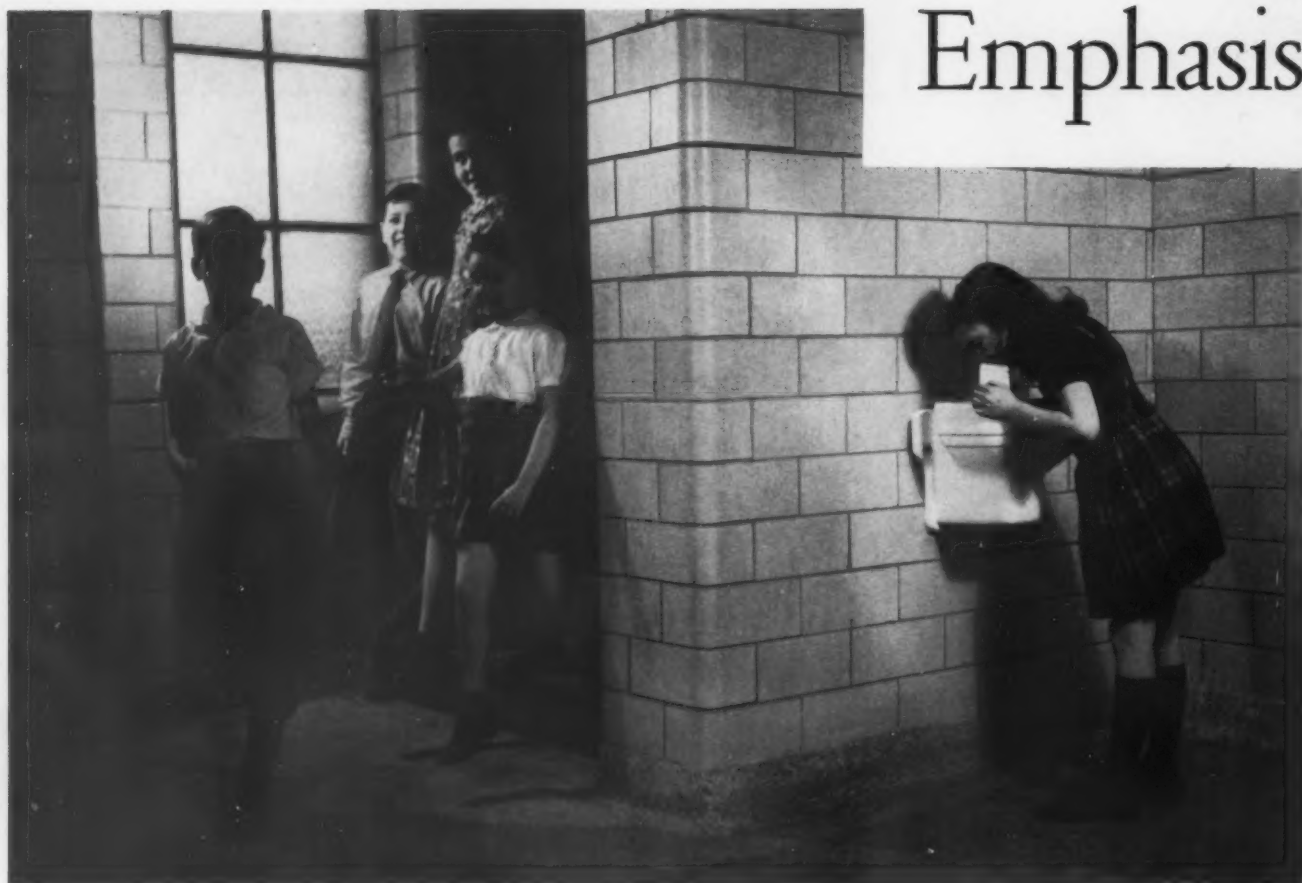
Hand Flush Valve Preferred

Fixtures of a type similar to those used at home are desirable. For this reason, the hand flush valve has an advantage over the seat action valve. The latter type, while well adapted to public toilets, has certain disadvantages when used by pupils, particularly the young ones. The habit of flushing the toilet is soon forgotten, the excuse at home being that they do not have to flush them at school.

The item of soap containers is chiefly a matter of choice. It is well to bear in mind, however, that a type that will not stand hard usage will soon give trouble.

There are many types of paper holder with arguments in favor of each. Here again, it is desirable to use fixtures as nearly like those at home as possible. The box type with folded sheets is good for the public toilet but is likely to give trouble to the younger pupils, especially when the fixture becomes clogged, as the best of them do. The old-fashioned roll type is still in vogue and, when designed so that only a few sheets unroll at a time, is quite as economical as the box type. One could fill a page about the quality of paper to go in the holder, so simply let us say in passing that this is one place
(Continued on page 49)

Emphasis



BUILDINGS in which school children spend so much of their lives between the ages of 5 and 18 have not had too many improved standards during the last ten years. Many new conditions have to be met. Education is changing at such a rate that the housing of its activities has come in for only a part of its just measure.

Now certain of its needs may be met literally by formulas. Light, heat and ventilation no longer need puzzle anyone willing to read. The number of pupils and the general plan of the building determine the number and the size of the wash-rooms. Most states have incorporated into their codes suggestions which, while they may vary somewhat, will be found to be substantially alike and usually adequate. The question becomes one of considering materials, fixtures and fittings by which these rooms may be made sanitary, comfortable and attractive.

Floors must be not only non-absorbent but also as safe as possible, nonslippery, durable and sightly. The answer is a mineral substance. For average use, terrazzo and tile

ALVYN PIERSON

are recommended. Terrazzo with brass division strips ground smooth is highly waterproof, attractive and with an abrasive chip, nonslippery. Colors may be made to harmonize with any scheme. If tiles are used, they should be grouted with waterproof cement and one of the many suitable materials should be used integrally.

The floor and base should be continuous at least about 2 inches above the floor level. Wainscots should be not less than 5 or 6 feet high and the wainscot material should be carried in to form window sills and jamb. Doors probably will have steel bucks so that the wainscot can be set tightly against them. There should be metal thresholds to the doors so that the tile is tight against them.

Urinals set in the floor are abominable and floor drains are unnecessary. There is just one way to keep these rooms clean and that is through supervision and mopping. Tile, wainscots and floors, even terrazzo,

do not long resist successfully the onslaught of water under pressure. Floor tile, properly pounded into position and thoroughly grouted, resists more than wall tile. Two methods are used. The first is "buttering," which consists of entirely covering the back surface of a single tile, then pressing it into the wall, tapping it into place and wedging it with tooth-picks until the cement is set, then grouting. The other method, termed "floating," consists of leveling the wall coat with a grout and applying the tile to the surface. Suction and hardening cement do the rest. With a skilled worker the results are satisfactory.

Other materials that are now available should be considered. Terracotta, for example, has a level surface that is guaranteed to 1/16 inch to a plane ground on four sides. Both color and texture are available in this highly durable material and the price (about \$1 per square foot against 75 cents for tile) is not too much for the results.

Then, too, there are the other various extruded units that are glazed. While these are not ground to a

on the New



size, they are usable and with care in selection of pieces make a good appearing wall. While terra cotta permits of caps and bases of almost any section, a cove at the intersection of the floor and the base with no projection and a flat surface to the top course, which is returned to the plaster with a bull nose, is the best construction.

Hard plaster and paint on the wall above the wainscot and on the ceiling make a perfect finish. There are several prepared finishes for plastering that have merit, but as there is no great amount of moisture in a school washroom, the selection of material need not depend necessarily upon its waterproof qualities. If such materials are used, insist that the manufacturer consider the surface upon which the product is to be used and that he be responsible for the result.

Sheet glass is not a wise choice in school washrooms, but there are several compositions available that come in sheets and, being glazed, discourage marking and make cleaning easy. One thorough cleaning of the walls with cloths is worth several

New fixtures must be sturdy stuff to withstand roughhouse tactics.

"hosings," and is far more conducive to the long life of the materials.

It is recommended that the toilet compartments have doors opening "in," thus avoiding possible injury to others or blocking of the passage. This plan is sound, although it obviously requires more room inside the compartment.

Marble, soapstone, slate and metal are standard materials for compartments, and glass brick, too, offers great possibilities. Marble grows rough and absorbent unless it is washed and polished. Soapstone is excellent, but in a few years it becomes scratched and discolored, although it is nonabsorbent. Metal is good, if the right product is selected. The partitions and doors should be flush and sound deadened, with all fittings in chromium finish. Heights are kept to 5 feet 6 inches at most, thus affording adequate ventilation and light.

There should be paper holders in all compartments with paper inter-

locked in separate sheets. The objection to rolls is that they unwind so interestingly. Supervision, inspection and constant service are effective in washrooms. Maintenance is lowest where depreciation is quickly acted upon.

Closet bowls should be of porcelain and should have large passages. A good test is to see if they will pass a $2\frac{1}{2}$ or $2\frac{3}{4}$ inch solid ball. There should be no gadgets, such as local vents. From the standpoint of cost and of space needed, the floor-set type is better. Iron connections are better than the floor flanges used in the old putty method. Wall hung fixtures, on the other hand, may be cleaned underneath.

Low flush tanks, besides being bulky, are not practical as they are not fast enough in refilling and may be tampered with too easily. Flush valves are the best type. The hand operated valve with metal handles is recommended for high schools; for elementary schools, the seat operated automatic valve.

Valves may give trouble occasionally, but any reliable company will
(Continued on page 49)



ARE THEY HEADING . . .

• Turn to page 86 for bibliography of school plumbing literature from scientific and commercial sources

Old Washrooms

IN MANY states school trustees and officials are, or soon will be, preparing the new budget. Recommendations and requests are flowing in for various textbooks, supplies and new equipment for laboratory and shops. The plant custodian has carefully prepared a schedule of roof repairs, walls and trim to be painted, floors to be resurfaced and refinished, and new hardware and electric fixtures to be installed.

How many of the new budgets will provide for modern washrooms to replace antiquated facilities that may exist in the school system? If the future continues as the past, the expenditures for this purpose will be only a negligible part of the vast total of the repair and replacement accounts.

There will, of course, be the usual maintenance: replacing worn washers, repairing valves, replacing a broken seat, and here and there installing a few new fixtures. Some schools are sure to meet the problem of ventilation with a pennywise solution, such as the district that,

rather than run a toilet room exhaust duct vertically 30 feet to the roof and provide a ventilator, ran it horizontally 20 feet to a classroom flue. The pupils in this classroom, under certain atmospheric conditions, were never in doubt as to when the toilet exhaust was functioning.

Antiquated washrooms give rise to many needless problems and add immeasurably to the educators' already heavy burden. All too frequently to his desk come reports of defaced walls and stall partitions; of stall doors torn from their hinges; of enameled surfaces scratched with a sharp instrument; of valve and faucet handles, seat bolts and soap containers removed by some enterprising pupil with a pocket screw driver or pliers; of towel and toilet paper dispensers torn from their fastenings; of broken flush valves and split seats; of urinal drains and lavatory wastes clogged with paper; of faucets left open when not of a self-closing type; of balls of wet toilet tissue thrown against and adhering to the walls and ceilings.



FOR THIS ANTIQUATED BASEMENT WASHROOM . . .

Rejuvenated!

RALPH E.
HACKER

Is it surprising that one harassed superintendent, when asked for suggestions for needed innovations in school buildings, replied: "Means of detecting devilry in the toilet rooms, such as a peep hole or periscope"?

Perhaps the real solution might be found in modernizing these rooms and equipment. Bright, sanitary, well-ventilated washrooms and equipment kept in spotless condition will command the respect of the pupils.

The first considerations for a modernization program will be the number of rooms required, the number of fixtures for each and where these rooms should be located.

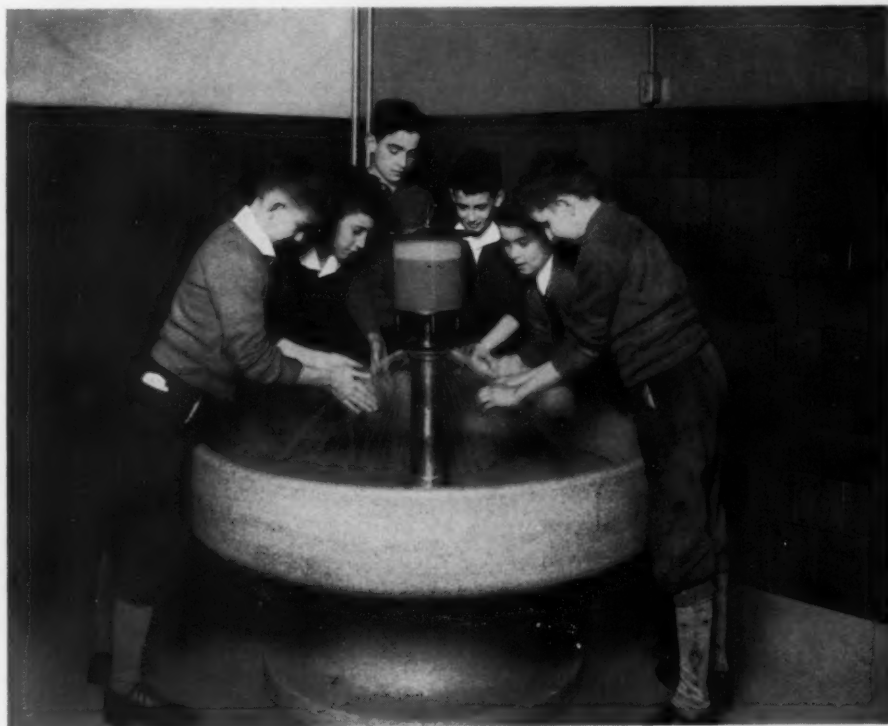
The number of fixtures will be determined by the enrollment. Differences of opinion exist and codes differ as to the ratio of fixtures required. As a general rule, water closets and urinals for boys are between the ratios of 2 fixtures to 30 to 45 boys with the ratio of urinals to water closets of 2:1 to 5:3. For girls, the ratio is likely to be 1 water closet to every 20 to 30 girls. The

smaller ratios are for elementary schools and the larger, for junior and senior high schools.

There should be not less than two lavatories to each pupil washroom and more as required by the number of fixtures, generally 1:3 or 1:4, the smaller number of fixtures for the elementary school. Some codes require double this number.

A check of the time spent by pupils at the lavatories shows it to be from six to forty-five seconds, with the majority below twenty and very few exceeding forty-five seconds. A ratio requiring more fixtures than the 1:3 seems an unnecessary outlay.

Rooms should be of ample size for passing but not too large or they will serve as places to loiter. Washrooms in the older buildings are generally located in the basement. New locations must be found, preferably on each floor above the basement. If facilities are not provided for special rooms used by the public, the pupils' washrooms should be located so as to be accessible yet



OR FOR SAFE MODERN FACILITIES?

allow little or no trespassing in the building proper. In schools of not more than eight rooms, first floor washrooms will suffice if funds for additional installations are not available.

In smaller buildings, a classroom located at intersecting corridors can be divided into two toilet rooms with interior screened entrances from opposite corridors. This will concentrate alteration work and the soil, waste, vent and water lines. If possible, wooden floor joists should be replaced with fire resistive construction to eliminate shrinkage or settlement; urinals should be recessed flush with floor.

Slop sink facilities can be readily incorporated and will materially assist the janitorial staff. Water closets should have a large trapway, not less than 2½ inches in diameter, and

should be of vitreous china with an elongated bowl or an extended lip and with syphon jet action. Automatic seat action is generally preferred to hand operated flush valves. Seats should be open front and back and of impervious material.

Urinals should be of vitreous china, individual type, flushed automatically in battery or individually hand operated. They should be recessed slightly below the finish floor, which should be pitched for proper drainage. When concrete floor slabs are in place, a wall supported type of urinal is practical. Anemometer tests have shown that local vents, which used to be considered essential on urinals, actually are ineffective.

Lavatories should be approximately 18 by 20 inches in size and of vitreous china with integral backs and antisplash rims supported on hangers securely bolted to the wall. Setting heights to the rim of 26, 28 and 30 inches will be found satisfactory for elementary, junior and senior high schools, respectively. Lavatories should be located between the door and toilet fixtures.

Chain stoppers should not be used. The tendency of adults and pupils is to wash under running water; therefore, a pop-up waste or no plug at all, with compression or metering faucets, will eliminate some problems, reduce maintenance and be economical of water.

Hot or Cold Water?

Considerable division of opinion exists as to the need of hot water for pupil lavatories, particularly in elementary schools. From observation of pupils in the washrooms, it appears that, with rare exceptions, faucets are used indiscriminately without regard to the marks indicating hot and cold. When hot water is eliminated, it apparently is not missed.

Soap systems may be individual dispensers with liquid or powdered soap, or a tank supplying liquid soap to wall or basin valves. Piping should be of black wrought iron and fittings of black iron. Pipe and fittings should be concealed and have chromium plated exposed parts.

Like many subjects connected with school planning, there is considerable

loose thinking in regard to lighting. Some codes require excessive window area; in others anything but unilateral lighting for washrooms is taboo. Generally obscure glass must be used, which eliminates the beneficial action of the sun's rays or of sky brightness. Stall partitions shut off direct light within the enclosures in any event.

Even in fairly recently constructed buildings, washrooms may occasionally be found with full requirements for glass area but with a reading of from 1 to 1½ foot candles at the fixtures and center of the room. The best distributed natural light is from overhead. The surest and most efficient light provision is plenty of artificial illumination for every part of the room and compartment.

Proper mechanical ventilation, with an adequate number of well-located exhaust grilles, is essential. Don't expect the exhaust to function properly when pulling on a sealed room and don't overlook the problems of the unsealed room.

In one school recently constructed at a cost of slightly less than \$600,000, toilet room odors were noticeable in the corridor and in the cafeteria during the lunch period. A check of the condition showed that the odors were coming from below the door of a toilet room, directly across the corridor, into the cafeteria, the doors of which were open during the lunch period.

The cafeteria ventilating equipment was inadequate, about one-fifth of the capacity needed for the size of the room, and was so located as to short circuit the air to the vent flues. An anemometer used on the air currents in the washroom showed the local vents of the urinals to be entirely inoperative; a small amount of air was being exhausted from the one ceiling grille connected by duct to some remote exhaust. Cold air was found to be coming down each of the water closet vents, out of the bowl into the room and, from there, beneath the door to the corridor and cafeteria.

To avoid toilet odors, not only is proper ventilation required but the floors, walls and partitions must be of nonabsorptive materials. Floors of ceramic tile or terrazzo best meet this requirement. Ceilings and

walls above the wainscoting should be of tinted or painted plaster. Walls wainscoted to a height of 6 feet with glazed tile, marble, enameled brick, glass block, opaque fire polished ceramic structural slabs and structural glass, all are sufficiently nonabsorbent. The last two types of material must be used with due precautions to prevent cracking as a result of settlement or shrinkage stresses.

Screen and stall partitions of marble are most satisfactory. Slate and soapstone qualify structurally but are considered absorbent unless given some type of surface finish. Obscure wire glass partitions have many advantages but they are too easily cracked. Metal partitions, because of lower cost, are most generally used.

Stall doors of metal are most satisfactory and preferably should open in. Opinion differs as to the desirability of omitting doors.

If all metal of lighting fixtures, hardware, exposed pipe and fittings, toilet and towel dispensers is chromium plated, it will add greatly to the brightness and clean appearance.

Lavatory Essentials

Toilet paper dispensers should be provided for each water closet; towel dispensers, for each lavatory, and mirrors, at lavatories and in other locations.

With first quality fixtures, good lighting, proper ventilation and an attractive pattern and color selection for the materials for floors, walls, stalls and trim, the modernized washrooms will be not only sanitary and attractive but a source of pride and satisfaction that will go a long way to create an esprit de corps among the pupils that will eliminate "deviltry."

The transformation of obsolete school washrooms into attractive modern toilet rooms is neither impossible nor inherently difficult. Each community may have some special "antiquated" problems to cope with, but careful study will show that money spent wisely on behalf of long overdue modernization in this field will pay dividends in efficiency and comfort to the community, the school system and to the child as an individual.

To keep clean and odorless the wash bowls, drinking fountains, water closets and urinals made of vitreous china or enameled iron requires thorough daily attention and, besides, careful selection of the cleaning agents.

UNCLEAN toilets and washrooms will often condemn the cleaning service of an entire building. Toilet room odors penetrate into the far corners and give the impression that the corridors and other rooms are unkempt and insanitary.

Cleaning of washrooms consists of a number of duties requiring varying frequencies of performance. Cleaning jobs usually include the sweeping, scrubbing, mopping and polishing of floors and the cleaning of bowls, urinals, sinks, lavatories, woodwork, walls, ceilings, mirrors and glass. Attention must also be given to plumbing, tanks, drains and traps.

The cleaning of toilets and washrooms must be made a daily task. It is a mistake to leave the thorough cleaning until the end of the week. The time to do most of this cleaning is while the rooms are the least used or while classes are in session.

School administrators should consider the advisability of having toilet rooms supervised during recess periods; this will effect a saving in the cleaning work that must come after the period is over.

Toilets and washrooms must be kept well ventilated. Window ventilation alone is not always satisfactory. On still days when the outside temperature is about equal to the inside temperature, the ventilation may become reversed and the odors may be wafted into the corridors and classrooms instead of outside.

Ventilation intended for toilet rooms should be separate from other ventilating systems of the building. Exhaust systems of ventilation are considered very satisfactory. This method of ventilation will cause the air to flow from the corridors into the toilet room and out of the building, thereby preventing odors from entering the occupied parts of the building. The drawing of foul odors



Cleaning Simplified

K. P. GRABARKIEWICZ

from these rooms is essential. This type of ventilation also is used for lunchrooms and kitchens.

It is advisable to have timed flushing systems for urinals. In most instances the flush may be timed for intervals of not more than eleven minutes. This rate may be increased during recess periods.

The use of an old floor brush for cleaning in front of the urinals is practical. By increasing the flow of water to the gutter and by washing the dirt from the slab to the drain, the slab can be brushed clean and then dried with the aid of a squeegee or mop.

Drain pipes from urinals are often a source of odor and should be given special attention. Mild cases may be cleaned by dissolving sewer pipe cleaner in hot water and pouring it into the drain pipes. Drains sometimes become encrusted to the extent that the pipe is nearly filled with foreign scaly substances. Such a condition creates unpleasant odors and calls for immediate attention.

An especially constructed brush made of stiff fiber and wire bristles twisted between two heavy wires can be used to advantage in these cases. In some instances it becomes necessary to use a long chisel and scraper to remove the heavy scale before a brush can be inserted into the pipe.

Temporary odors should be removed by ventilation and permanent odors should be prevented by a systematic and thorough cleaning, aided by plenty of fresh air and sunlight. By keeping the slimy material and accumulations of dirt from the grooves and cracks of bowls, urinals and other toilet room equipment, bad odors can be practically eliminated.

It sometimes is necessary to use disinfectants in toilet rooms. The disinfectant may be added to the cleaning solution that is used in the care of toilets. It should be a germ killer and as nearly odorless as possible. Chlorine tablets dissolve easily in water and make a good disinfectant and the odor is not as penetrating as is that of ammonia or

carbolic acid. (Disinfectants should not be mistaken for deodorants.)

Vitreous china and enameled surfaces are apparently very hard and it is generally assumed that any cleaning material may be used to remove the dirt without injuring them. This is an incorrect assumption as experience has proved that the greatest care must be exercised in selecting cleaning agents for the daily maintenance of these surfaces. These agents should be of such nature that their use will produce a clean bright surface and will not scratch, discolor or otherwise damage the finish in any way.

No matter what type of cleaning agent is used, the surface after being cleaned should be rinsed with clean water and dried. A good soap will work well if the vitreous china surface has not become destroyed or marred by the use of harsh cleaning agents or acids.

If vitreous china surfaces have become marred and stained, the discoloration may be removed by the use of a bleach and cleaner combined. Considerable care and judgment must be exercised in the application and rinsing procedure when using this material in order that further damage may be held to a minimum. After the work of cleaning is completed, the surface must be rinsed thoroughly with water of slightly alkaline strength (ammonia or soda) in order to remove the bleach.

Guide for Cleaning and Inspection of Washrooms

	Yes	No
1. Is the floor properly treated and cleaned?		
2. Are walls and ceilings clean?		
3. Is hardware clean and polished?		
4. Are mirrors and glass clean?		
5. Are doors, window sash and trim clean?		
6. Is the ventilating system clean and in working condition?		
7. Are light bulbs and fixtures clean and serviceable?		
8. Are radiators clean?		
9. Is the waste can clean?		
10. Are wash basins clean?		
11. Are faucets clean and free from leaks?		
12. Are all waste lines open and clear?		
13. Are traps free from odors?		
14. Are toilet bowls and seats clean and sterile?		
15. Are urinals clean and free from stain?		
16. Is the flushing rate sufficient?		
17. Is the floor drain clear and free from obstruction?		
18. Are cleaning tools clean and in good condition?		
19. Is the temperature of the room correct? (Between 55° and 60° F.)		

Rust spots and water stains are usually hard to remove; caution should be used in selecting cleaning agents that will not scratch or injure the surfaces. To test such materials, place a small quantity between two pieces of glass and rub the glass together for a few minutes. If the glass appears to have been scratched on the surfaces where the powder was rubbed, it is evidence that the cleaning material will also scratch china and enameled surfaces. A little waterproof wax applied to the cleaned surfaces will prevent rust and water stains from adhering to them. Furthermore the next cleaning operation will be somewhat easier.

A new type of toilet seat made of bakelite and seamless steel, recently put on the market, is desirable from the standpoint of easy cleaning. It provides a very small amount of

space to become contaminated and ample space for ventilation and cleaning.

When toilet room floors are made of cement or terrazzo they should be hardened and in some cases sealed. Magnesium silico fluoride and many good commercial products may be used for hardening these floors. This treatment makes the floors less likely to absorb any material that might cause odors. Floors in toilet rooms should be hard and smooth, as rough, soft floors are difficult to keep in a sanitary condition. Washroom floors should receive daily attention and should be washed with a hot solution containing an effective disinfectant.

Continual mopping and scrubbing of cement and terrazzo floors with either a caustic or acid cleaner will cause rapid deterioration, but one or two good scrubblings with a caustic cleaner that is strong enough to remove all dirt will not harm the floor to any great extent. It is the continued alternation of scrubbing and drying that does the damage. It is much better to use a mild neutral soap instead of a harsh caustic cleaner.

Walls and ceilings of toilet and washrooms may be kept clean by following the general procedures recommended for other parts of the building. However, special measures should be taken to keep pencil marks erased from walls and partitions for, if such marks are left where others may see them, a rapid increase of such defacement usually results.

In many cases it is advisable to make up instruction sheets to guide beginners in their work and to caution them on points that may be harmful to surfaces that are to be cleaned. A sample of a cleaning operation accompanies this article.

Sample Instruction Sheet for Cleaning Crew

Operation: Cleaning a Drain With a Drain Pipe Cleaner.

Tools and Materials Required:

- 1 galvanized iron pail containing hot water.
- 1 can of drain pipe cleaner.
- 1 plunger.
- 1 cardboard upon which to place the pails.

Explanation:

When drain pipes, whether from sinks, wash bowls or toilet bowls become sluggish and the plunger has no effect on them, it is necessary to use a material that will dissolve the grease or other obstructions that may be causing the trouble.

The following are directions for the use of sewer pipe cleaners that are composed mainly of caustic alkali:

Procedure:

1. Place the pail half filled with hot water upon the mat or cardboard.
2. Open the can of cleaner and empty the contents into the hot water, using special care to see that it does not splash.
3. When the caustic is all dissolved, pour the solution, a little at a time, into the drain pipes that are clogged and allow it to stand for a few minutes between each application. When the drain pipe is open again, it should be flushed with hot water. (Time is an important element in this job so do not rush it.)
4. Clean and put away the tools for future use.

Caution:

1. Great care must be used when handling drain pipe cleaner, as it will burn both clothes and skin.
2. This material will act to a small extent on lead pipe and will affect the gloss on vitreous china and enameled iron.
3. Use only infrequently in lead pipe and, if possible, protect the surface of the fixture with a coating of paraffin, wax and kerosene.
4. Do not attempt to dissolve the pipe cleaner in an aluminum container.
5. Do not inhale the fumes of caustic solution.
6. Sewer or drain pipe cleaners should not be used when the traps or pipes are completely clogged as it will remain in the pipes, endangering the person who must later disconnect them.
7. Some sinks and wash bowls require periodic treatment with a material of this kind to keep them performing as they should.

Emphasis on the New

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make minor adjustments and will replace defective parts, usually without charge. Even an excellent local plumber may not be competent to repair one of these modern fixtures.

The pressure tank is an improvement on the low tank, but it is not as satisfactory as the flush valve. Any toilet system requires adequate water. While valves will operate at only 5 pounds' pressure, volume of water is necessary as well. Each fixture should have a separate shut-off, and each valve should have a vacuum breaker so that no water from a bowl may enter the drinking water system.

Hard rubber seats are best, although some of the other composition materials make excellent wearing seats. Covers are not used. While bolts are used to secure the fixture to the floor, it is almost useless to apply the porcelain covers supplied for that purpose. They are soon knocked off.

The bowl should be designed with a large water surface and with an extended lip. Syphon jet or syphon action should be used exclusively.

Urinals should be of a water flush type. The overhead or automatic flush types are wasteful of water. The pedestal type of fixture that flushes with a foot valve above the floor overcomes objectionable odors and splashed wet floors. While the pedestals are made in only one height at this time, a similar wall-hung fixture may be placed at the proper height. This type of fixture eliminates the necessity for disinfectants and hoses, which are destructive to building materials and are insanitary.

The trough type of fixture is out. By eliminating it, the greatest advance has been made in years toward a comfortable, sanitary, odorless washroom.

Wash basins are coming into their own. The rising generation has learned that clean hands have great value. These fixtures sometimes are of iron enamel or of vitreous ware. As they are light in weight they may be hung securely to the walls or they may be supported on a single

leg pedestal. The leg is objectionable since it is an annoying obstruction in cleaning.

An excellent type of wash fountain, semicircular in design, of terrazzo or other materials, that is set against the wall may be used by four children at a time. Water control is by the individual. There is no danger of infection since the water flows off immediately. Waste basins should have the pop-up type of shut-off. Liquid soap should come from a central tank via pipes built into the walls. The push-button valve supply should extend over the basin so that the excess soap will fall into it.

Both hot and cold water should be provided. Hot water costs more but most school authorities realize that the additional cleaning power of warm water is worth the added

cost of maintenance. Self-closing faucets save water but may be the cause of indifferent washing. Dispensing cabinets for paper towels should have closed tops with self-closing ports to receive used towels. Vending machines, coin operated, are placed in some washrooms. A mirror above each basin is necessary.

Washrooms should have an outside wall with windows where direct sunlight reaches at some time during the day. A rule that the window glass area should equal 10 per cent of the floor space is mandatory in some states. Some washrooms are lighted by glass bricks and ventilated by fans. The artificial light now provided is ample as against the frequent 40 or 60 watt single unit that was grudgingly installed in the past.

There is a definite trend in washrooms toward a pleasing, odorless, well-lighted and comfortable unit in a building that reflects civic interest and local community pride.

Planned in Modern Manner

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where quality and not price should rule.*

Toilet stalls should be of a durable, easily cleaned material; painted wood probably is the least desirable. While marble is, perhaps, best, its use is not always possible because of the cost, so some substitute must be considered. The steel partition is now available at low cost, but care must be exercised to see that there is no chance for rust to occur. The most satisfactory type is that in which two pieces of steel are used with a fiber center to resist rattle. The surface of the steel should be a hard baked-on enamel finish with all connections and points of contact with the floor of a shiny rustproof material.

In no case should the partition itself come closer than 6 inches from the floor. The supports for the partition should be solidly fastened to the floor, walls and ceiling, but never in a way that they will invite gymnastics.

*For a comparison of various types of toilet paper, see *The Nation's Schools*, December 1938, page 50.

The doors to the stalls should be of the same noiseless type as the partition with a locking device and hinges that will keep the doors open when not in use. The doors should swing into the stall with a combination bumper and coat hanger at the top. While it has long been the custom to leave the doors off the stalls in the boys' toilets, this is finally being corrected and boys are now being given the privacy to which they are entitled.

Each toilet room should have adequate mechanical ventilation, even though there is a large window in the room. The usual method is to draw the air in louvres in the doors and then to exhaust the air into an exhaust vent near the floor. The only point is to see that the exhaust is placed far enough from the door so that the entire room is properly ventilated. If the exhaust is too close to the door, only that area between the door and the exhaust will be ventilated. This will leave the room as badly off as ever and without any apparent explanation.

Do Teachers Help

DEMOCRACY in school administration is a popular field of inquiry among educators. Teacher participation in developing administrative policies and practices is discussed, mainly in the affirmative, by institute lecturers and writers in educational literature.

The present extent of teacher participation was studied by means of a comprehensive inventory in which the findings of 660 teachers and 90 administrators from 103 California elementary and secondary schools were tabulated and summarized.

Does the much advocated democracy in school administration actually exist? The principal of the evening high school, Pittsburgh, Calif., made the objective study reported

Three classes of schools were selected according to size to participate in the study. The administrator first filled out a form, returned it and then distributed other forms to the teachers who mailed them upon completion, direct.

In order to offer a variety of choices, four types of participative group effort were selected. These four types do not cover all kinds of participation, but they offer sufficient range so that certain trends may be determined. Respondents were asked to check the type most representative of the manner in which each administrative policy or practice was developed during their tenure with the present school administration. Reactions from the whole group generally indicated tendencies and trends in the various types of development of administrative functions, although there were some inconsistencies.

In type 1 teachers and administrators cooperate, both in the development and in the final decision, in making changes in administrative policies and practices. Table 1 indicates the number and per cent of teachers and administrators in both secondary and elementary schools

who state that changes were made by this type in 10 administrative functions. These 10 functions were selected from 50 as a sampling of the various fields of administrative activity.

Conclusions regarding type 1, as based on the tabulations for the 50 functions, may be briefly summarized as follows:

Type 1 was used in only 14 per cent of changes made, as reported by teachers, and in 26 per cent of the changes as reported by administrators. The mean for both teachers and administrators is 21 per cent.

Functions that were changed most extensively by type 1 indicate a greater degree of satisfaction by elementary and secondary teachers and administrators than functions in which this type was used least.

Type 1 is being used to a greater degree in making changes in the smaller schools than in larger schools.

Teachers having a few years' tenure with their present administration report a higher percentage while those with the longest periods of tenure report the lowest percentage of use of type 1.

Type 2, differing only from type 1 in that the administration alone has

the responsibility for the final decision, is used more frequently than type 1, the mean for all groups (teachers and administrators) being 23 per cent, as based on the data for the 50 functions. Table 2 shows the data for 10 selected functions.

Type 2 is used twice as often in the small 10 to 12 teacher high schools as in the 31 to 80 teacher schools.

With an increase in administrative power from type 1 to type 2 there is a corresponding shift to teachers of longer tenure reporting changes by means of type 2.

Type 3, characterized by control centered in the administration with criticisms and suggestions by the teachers, was employed in only about 13 per cent of the changes in administrative policies and practices as reported by teachers and administrators. This type was used less than any other; 8 per cent less than type 1, 10 per cent less than type 2. This summary is based on the data for the 50 functions rather than on the sampling as shown in table 3.

Type 4 places the development and final decision of changes in administrative policies and practices in the hands of the administration alone.

Table 1—Prevalence of Type 1 as Reported by Teachers and Administrators in Secondary and Elementary Schools

Policies and Practices Regarding	High Schools				Elementary Schools			
	Teachers		Administrators		Teachers		Administrators	
	Num-ber	Per-Cent	Num-ber	Per-Cent	Num-ber	Per-Cent	Num-ber	Per-Cent
1. Work load of teachers.....	7	5.4	6	20.0	4	5.2	0	0.0
2. Supervision of instruction...	0	0.0	3	16.7	2	2.5	0	0.0
3. Salary schedule for teachers...	9	5.8	1	4.0	8	6.2	0	0.0
4. Rating scale for teachers...	3	4.2	1	9.1	1	2.0	0	0.0
5. Construction or revision of curriculum.....	47	24.9	22	73.7	31	25.8	5	29.4
6. Student government.....	16	14.7	5	25.0	18	26.5	0	0.0
7. Scope and organization of guidance and counseling programs.....	22	13.5	12	46.2	12	30.8	0	0.0
8. Standards for advancement or demotion of pupils....	17	21.8	5	38.5	21	26.9	1	3.6
9. Type of marking system in school.....	23	21.3	7	29.2	30	23.1	10	34.5
10. School budget.....	1	1.0	1	4.5	0	0.0	0	0.0
Mean.....		11.3		26.7		14.9		6.8

Run the Schools?

WILBUR E. MOSER

About half, 43 per cent, of the changes were made by this method as reported by teachers and administrators. The teachers report the employment of this type twice as often as the administrators. This summary is based on the data from a study of all 50 functions rather than on the 10 representative functions tabulated in table 4 on the next page.

Functions changed most frequently by type 4 are reported to be less satisfactory to teachers and administrators than functions changed by other types.

Type 4 is used extensively in larger schools. The small 10 to 12 teacher high schools show the least use of this type of procedure.

Teachers having more than eight years' experience with the same administration indicate a greater use of type 4 than do teachers having less experience.

Generally speaking, there is little teacher participation in developing policies and practices in the 50 representative administrative functions. If the data for types 1 and 2 are combined as representing certain aspects of a democratic procedure, only 30 per cent of the teachers report changes made by these two kinds of

participation. The administrators state that 57 per cent of the changes were made by one or the other of these two methods. This probably indicates that these types of procedure were used by the administrators with not the entire teaching personnel as a group, but with a few individuals and with minorities of teachers. This interpretation would ac-

count for these large differences in percentages.

If types 3 and 4 are representative of nonparticipating procedures of teacher participation, it is found that approximately 70 per cent of the teachers and 43 per cent of the administrators state that changes in policies and practices in administrative functions were brought about by either one or else a combination of these two nonparticipating types.

Table 3—Prevalence of Type 3 as Reported by Teachers and Administrators in Secondary and Elementary Schools

Policies and Practices Regarding	High Schools				Elementary Schools			
	Teachers		Adminis-trators		Teachers		Adminis-trators	
	Num-ber	Per-Cent	Num-ber	Per-Cent	Num-ber	Per-Cent	Num-ber	Per-Cent
1. Work load of teachers.....	22	17.1	8	26.7	3	3.9	6	31.6
2. Supervision of instruction...	4	6.1	3	16.7	10	12.3	0	0.0
3. Salary schedule for teachers...	14	9.0	3	12.0	9	7.0	1	4.5
4. Rating scale for teachers...	8	11.3	0	0.0	3	6.0	3	75.0
5. Construction or revision of curriculum.....	23	12.2	2	6.7	18	15.0	3	17.7
6. Student government.....	15	13.8	3	15.0	7	10.3	6	37.5
7. Scope and organization of guidance and counseling programs.....	22	13.5	8	30.8	4	10.3	3	18.7
8. Standards for advancement or demotion of pupils.....	6	7.7	4	30.7	4	5.1	7	25.0
9. Type of marking system in school.....	17	15.7	4	16.7	24	18.5	3	10.4
10. School budget.....	12	11.5	7	31.8	2	3.5	3	15.0
Mean.....		11.8		18.7		9.2		23.5

Table 2—Prevalence of Type 2 as Reported by Teachers and Administrators in Secondary and Elementary Schools

Policies and Practices Regarding	High Schools				Elementary Schools			
	Teachers		Adminis-trators		Teachers		Adminis-trators	
	Num-ber	Per-Cent	Num-ber	Per-Cent	Num-ber	Per-Cent	Num-ber	Per-Cent
1. Work load of teachers.....	18	14.0	8	26.7	9	11.7	4	21.1
2. Supervision of instruction...	6	9.1	6	33.3	5	6.2	0	0.0
3. Salary schedule for teachers...	21	13.5	7	28.0	18	14.1	4	18.2
4. Rating scale for teachers...	5	7.0	2	18.2	9	18.0	0	0.0
5. Construction or revision of curriculum.....	67	35.4	5	16.7	19	15.8	6	35.3
6. Student government.....	21	19.3	9	45.0	16	23.5	7	43.7
7. Scope and organization of guidance and counseling programs.....	28	17.2	4	15.4	6	15.4	10	62.5
8. Standards for advancement or demotion of pupils.....	17	21.8	4	30.7	20	25.6	15	53.6
9. Type of marking system in school.....	20	18.5	8	33.3	20	15.4	12	41.4
10. School budget.....	18	17.3	7	31.8	4	6.9	2	10.0
Mean.....		17.3		27.9		15.3		28.6

Teacher participation in school administration at present is largely limited to the offering of suggestions and making of criticisms on the part of minority groups of teachers rather than by cooperative effort of the whole teaching personnel or their recognized representatives. Final decisions are usually made by the administration alone.

Teachers participate to the greatest extent in developing policies and practices in functions that are closely related to classroom procedures and subject matter content. The greatest amount of teacher participation in all 50 functions is in regard to the construction or revision of the curriculum.

Functions that deal with control and supervision of pupils rank next.

This is particularly evident in the elementary schools where 50 per cent of the changes in policies and practices regarding pupil government have been made by types 1 and 2.

Next in order of teacher participation are functions that pertain mainly to matters of general business administration, such as the budget. About 85 per cent of the teachers do not participate in any definite way.

The least amount of teacher participation is in those functions that affect the teacher personally as a member of his profession. The supervision of instruction, the salary schedule, the work load of teachers and increases in salary, as a reward for growth and efficient service, show little or no teacher participation. Policies and practices regarding these functions are largely developed and decided by the administration with little or no participation on the part of the teachers.

It is these latter functions with which teachers are mostly dissatisfied. Would this dissatisfaction disappear if teachers were given more control in the determination of these policies and practices? Does teacher dissatisfaction in personal professional functions decrease his effectiveness as a teacher? Is it for the best interests of education to develop a more democratic procedure in the development of administrative policies and practices?

These questions and others of a similar nature, as well as the findings

of this study, indicate that a truly democratic school administration will result in increased educational effectiveness. Wise leadership, rich in sympathy and sincerity, not only will

create a wholesome and cooperative group of professionally minded educators but will increase the value of the activities and performance of all members of the school staff.

The Real Reason Is Patronage

C. A. HALL

AN ARTICLE in the November issue of *The Nation's Schools* by Henry A. Wise, entitled "Married Women as Teachers," has inspired my attempt to show where Mr. Wise has completely side-stepped the principle underlying "the married woman" rule which has gained so much headway in this country in recent years.

We have heard and read arguments for and against the married woman teacher. All of these arguments, however sincere, are based on experiences. Experiences with married and unmarried women teachers determine, to a large degree, the administrator's conclusions on the subject.

The real reason has been disguised all these years. We all have seen efficient and inefficient married and unmarried women teachers. We have heard all of the arguments. Mr. Wise presents one in the last paragraph of his discussion that is new and weak in defense of the rule.

"One interesting phase of the superintendent's work is discovering possibilities in teachers and taking beginning teachers and helping them develop into teachers far better than some of those whose places they are filling. If all women continued teaching after they are married, what an opportunity the superintendent would be missing!" Why not apply this argument to men as well as women?

No, the reason for the rule has never been mentioned in any of the arguments I have heard or read. The underlying reason is patronage.

The married woman rule results in a much larger annual turnover than would be the case if the rule did not exist. With a greater turnover, the superintendent increases the number of jobs to be handed out to qualified seekers of patronage. What superintendent does not thoroughly enjoy dispensing patronage to a son, daughter, relative or friend of a friend of the schools? What person, be he superintendent of schools or a shoe shineboy, does not thoroughly enjoy being responsible for someone being placed in employment?

Is it not true that the proper dispensing of patronage tends to perpetuate a superintendent in office? Although the "married woman" rule makes for a greater annual turnover of teachers, thereby creating more patronage to dispense, it also creates much ill feeling on the part of those so disqualified.

Insignificant as it may be at first, this ill feeling in time, if added to other ill feelings caused by trifles, may cause the undoing of a superintendent.

For a change, then, let us all discuss the reason underlying this "married woman" rule rather than discuss the reasons for and against it.

Table 4—Prevalence of Type 4 as Reported by Teachers and Administrators in Secondary and Elementary Schools

Policies and Practices Regarding	High Schools				Elementary Schools			
	Teachers		Administrators		Teachers		Administrators	
	Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	Per Cent
1. Work load of teachers.....	82	63.6	8	26.7	61	79.2	9	47.4
2. Supervision of instruction...	56	84.8	6	33.3	64	79.0	18	100.0
3. Salary schedule for teachers...	111	71.6	14	56.0	93	72.7	17	77.3
4. Rating scale for teachers...	55	77.5	8	72.7	37	74.0	1	25.0
5. Construction or revision of curriculum.....	52	27.5	1	3.3	52	43.3	3	17.7
6. Student government.....	57	52.3	3	15.0	27	39.7	3	18.8
7. Scope and organization of guidance and counseling programs.....	91	55.8	2	7.6	17	43.6	3	18.7
8. Standards for advancement or demotion of pupils....	38	48.7	0	0.0	33	42.3	5	17.8
9. Type of marking system in school.....	48	44.4	5	20.8	56	43.1	4	13.8
10. School budget.....	73	70.2	7	31.8	52	89.6	15	75.0
Mean.....		59.6		26.7		60.7		41.2

State Reins on Local Education

M. M. CHAMBERS

THE relations between municipal governments and city school districts in New York State may be briefly characterized as follows:

1. City councils must levy taxes for public education and determine the total appropriation for educational purposes, but their control is limited to the lump sum and they cannot interfere with detailed items of the budget of the board of education.

2. Some city charters impose additional restrictions on the manner in which the council may act upon school budgets.

3. City officials must see that educational funds are not spent except for purposes authorized by the Education Law, but this duty is ministerial and not discretionary and does not mean that they may withhold payment of claims that have been properly authorized by the board of education.

4. Title to school property must be taken in the name of the city except where the boundaries of the city and the school district are not co-terminous.

5. The power to remove members of boards of education belongs solely to the commissioner of education and may not be exercised by a mayor or other municipal authority.

When the board of education of the city of White Plains submitted its estimates for 1938 to the common council of the city in accordance with statute, the council ordered a reduction of approximately \$16,400 of the total amount (\$2,000,000). Contesting this reduction, the board of education pointed to the "home rule" city charter of 1917 which provides that the council may make reductions in the school budget only when specifically recommended in detail by the mayor. In this case the mayor had recommended specific reductions, but finally the council had ordered the general reduction without reference to his recommendations. A majority of the appellate division therefore properly concluded that the order was invalid because the council

Restrictions imposed by New York State upon local school control would remove political taint from the public school system. The validity of the state Education Law has been upheld by New York's high courts in these cases

had exceeded its powers under the charter.

In passing, the court took occasion to explain that the fiscal relations between cities and city school districts in New York State depend to some extent upon the varying provisions of the charters of different cities, although article 33A of the state Education Law, enacted in 1917, about one month later than the White Plains charter provision above noted, does lay down several principles of general application.

In discussing these principles briefly, the court said: "On boards of education is imposed the responsibility of furnishing an efficient system of education, with large powers expressed and implied. It may be said that no interference with such matters is tolerated, for the state-wide system of general education cannot be left subject to the caprice of local political interests. We state only general well-recognized principles."¹ It was not thought necessary to decide any question of conflict between the state Education Law and the city charter in this case, because the city council had failed even to observe the provisions of the charter with precision.

¹Board of Education of City of White Plains v. Rogers et al., 252 App. Div. 653, 1 N. Y. S. (2d) 44 (1937).

A minority of the judges dissented, relying on the sequence of decisions by the courts establishing the policy that city authorities may reduce the total amount of the education budget but may not reduce detailed items. This leads to other recent cases that illuminate the state-wide situation more fully. The courts have repeatedly held that under the Education Law the only manner in which a city council may reduce the education budget is by making a general reduction of the whole amount and that it cannot reduce or eliminate specific items of educational expenditure. If it specifies particular items in its order of reduction, these specifications are merely advisory and need not necessarily be followed.

"The board of education must make the final decision as to how the money under its control shall be expended in providing an efficient system of education, with high regard for the proper instruction, protection of health and general welfare of the children committed to its charge."²

Thus the Education Law places uniform limits upon the extent to which city authorities may interfere with the budgeting and expenditure of educational funds, but this does not affect any additional nonconflicting limitations that may be found in the city's charter, as is the case in White Plains. The decisions holding that the city councils in certain other cities may make general reductions in the school budgets are not applicable to White Plains, where the city charter further stipulates that reductions may be made only when recommended in detail by the mayor.

The purpose and meaning of article 33A of the Education Law had been earlier defined in a Schenectady case in 1930: "The Education Law was enacted so that the state might reassume its control of the instruction of our youth, which it had hitherto delegated to the municipalities. This resulted from the settled policy of the state to divorce the business of

²Reif v. Schwab, Mayor of Buffalo et al., 204 App. Div. 50, 197 N. Y. S. 127 (1922).

public education from all other municipal interests. The change was made for the very laudable purpose of liberating our system of public instruction from all political taint."³

Concisely stating the responsibility of the city authorities in educational matters, the court continued: "It is the duty of the city officials to appropriate the necessary funds for educational purposes and to see that the money raised by taxation and otherwise received for that use shall not be used for purposes other than those authorized by the Education Law." In at least two cases it has been necessary to remind city comptrollers that they have no discretionary authority to withhold payment of claims that have been properly audited by the board of education. In both cases the power of the board of education to direct and control the disbursement of educational funds, including payment of the salaries of all its employees, embracing administrative and clerical workers as well as members of the instructional staff, was upheld.⁴

As is well known, the title to school property is generally vested in the state and the property is held in trust for the state by the local board of education. Under New York law there are some exceptions to this common practice, as is evidenced by a decision of 1934, in which the court said: "If the board of education of any city of the state requires real property for its legitimate use, title thereto must be taken in the name of the city, unless the boundaries of the city and the school district are not coterminous."⁵ From this it must not be hastily concluded that the title to all city school property in New York State must be held by the municipal corporations; in many cases the boundaries of the school district do not coincide with those of the city, and it is likely that the proportion of such cases will increase as the desirability of including peripheral territory within the city school districts becomes better recognized.

³Board of Education of City of Schenectady v. Dibble, City Comptroller, 136 Misc. 171, 240 N. Y. S. 422 (1930).

⁴Reif v. Schwab and Board of Education of City of Schenectady v. Dibble, supra, footnotes 2 and 3.

⁵Board of Education of City of Jamestown v. Baker et al., 241 App. Div. 574, 272 N. Y. S. 801 (1934).

Returning to the relationship between the Education Law and the city charters, we may note that all charter provisions in conflict with the Education Law were repealed by its enactment. An example is a section of the charter of Cohoes authorizing the mayor to remove members of the board of education. In 1934 the court had occasion to deny this power by issuing a writ of prohibition, accompanied by a good exposition of the prevailing law.⁶

"It was clearly the intention of the legislature to place the public school system of this state under the control of the state education department and to prevent its being used as a political football. Neither can it be found that it intended that there should be a dual responsibility in the enforcement of the laws relating to

⁶O'Donnell v. Morrissey, Mayor, 151 Misc. 315, 272 N. Y. S. 451 (1934).

education, as this responsibility has been placed squarely upon the commissioner of education. Since the right to hear, try and determine all charges of official misconduct on the part of members of a board of education and the right of removal rest with the commissioner, to reserve to the mayor of a city a like power would be inconsistent with the general scheme of the Education Law and would serve no really useful purpose.

"The commissioner of education by reason of his experience in educational matters is peculiarly qualified to hear and determine the issues here presented and it would appear that it was the clear intent of the legislature to vest in him the exclusive power so to do. We are not concerned here with a matter of municipal government but we are dealing with a subject of the greatest concern to the people of this state."

Two Jobs That Don't Mix

(Continued from page 24)

at times of crises. Concentrated efforts must be made by all members of the faculty to uncover and solve all cases of maladjustment, covert as well as overt. The door of the guidance office must be open in practice as well as theory to all pupils without regard to their sensitivity or previous mistakes. A counselor-administrator type of organization violates all these criteria.

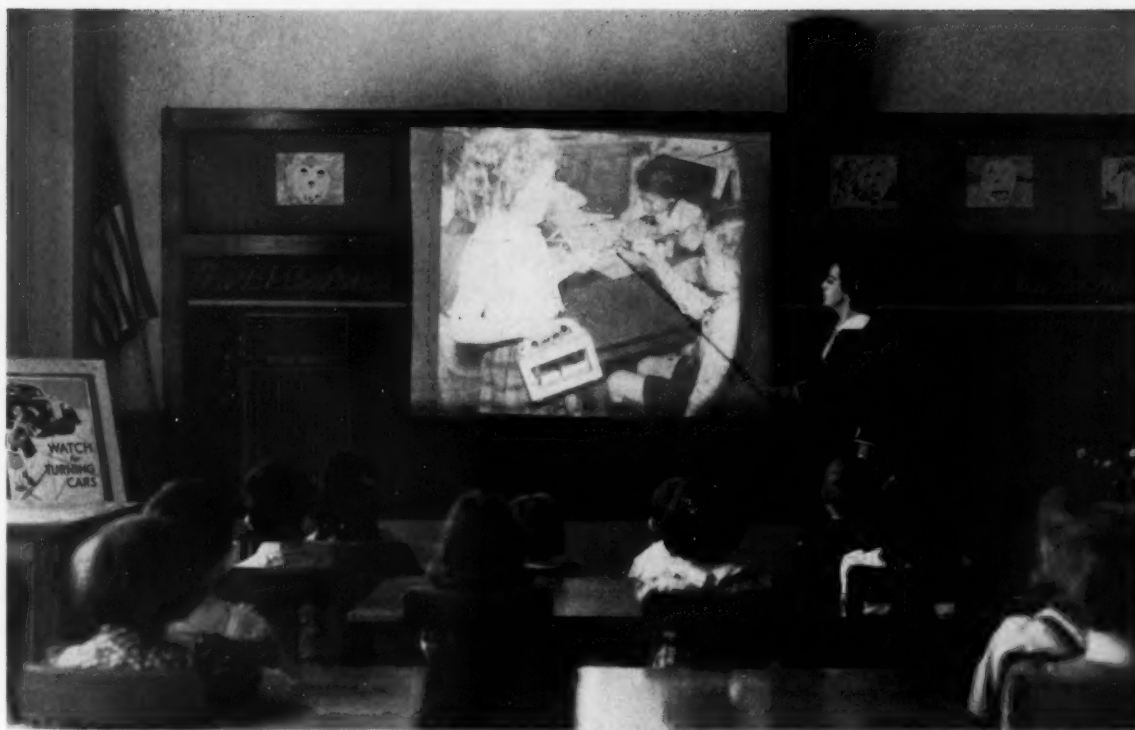
It is not necessary or wise for the counselor to be in charge of attendance in order to be able to apply guidance when needed. The duty is time-consuming and issuing admittance slips to a long line of returning absentees gives little opportunity for guidance, even in the few cases where it is called for. The majority of attendance irregularities are by the many pupils who are legitimately absent.

Most serious, however, is the necessity to exercise administrative judgments: on occasions give unexcused absence slips, administer punishment for illegitimate or excessive absence and tardiness and enforce the compulsory attendance law. A variety of efficient methods by which the

counselor can be kept informed on attendance can and should be devised.

The separation of guidance and disciplinary functions may be accomplished in various ways. Cases of misconduct may be referred to the principal or to his assistant. The counselor assists, by means of guidance technics only, in the solution of cases in which the pupil seeks his aid or in the solution of those cases that are referred to him by the principal. Such a plan promotes pupil self-discipline, assures strict enforcement of rules, enables the counselor to act as a friend and adviser of pupils and assures the principal of firsthand knowledge of rules violated, pupils who violate them and teachers who are weak disciplinarians. The counselor can be given a part-time assignment to teaching duties, preferably in group guidance, where his two major activities will supplement, rather than conflict.

Therefore, educational administrators who wish to set up permanently effective guidance programs will avoid the assignment of administrative duties to counselors.



Schools to See in Cleveland

CHARLES H. LAKE

THE pressing "problem of the thirty million new Americans" has been intelligently approached in Cleveland, Louis Adamic reports in his book "My America." In the nation's sixth city, where the descendants of more than 40 nationalities make up three-fifths of the population, there is "less stupid anti-immigrant prejudice," he says, than elsewhere in the country. For this the author credits the daily newspapers and their nationality columns. But many years have passed since Cleveland's public schools first attempted to crack the hard nut of prejudice in a systematic effort to dissolve the inferiority complex that afflicts the children of many races in America.

More than one school has demonstrated that the "good neighbor" policy pays tangible dividends in better citizenship. Informed Clevelanders will tell you that this approach to a pressing problem is a typical demonstration of the Cleveland Plan of education. No city and no school system can claim a monopoly of ideas, but Cleveland long has been

notable for its pioneering in many fields which now are integral parts of most good school systems.

The nation's first school-owned short-wave radio station began broadcasting last September with the aid of a \$42,600 grant from the General Education Board. Transmitting apparatus is located temporarily in Lafayette School, on Cleveland's east side, but will be moved shortly into permanent studios in the School Administration Building.

Ten years have passed since the first radio lesson was broadcast to elementary school pupils from a Cleveland commercial station. The lessons were on the air for two periods a day, five days a week, but the time allotted was considered too short.

The chief aim of the new school station is to give the superlative teacher a large "class," with some 25,000 as the maximum school audience. The station is available from 9 a.m. to 3:30 p.m. each day of the

week. Recorded music is played before and after each lesson and during otherwise "silent" periods between lessons for those schools that have use for such a program.

Subjects taught by radio include spelling, history, art, music, geography, science, English, health education, arithmetic and safety. There is a period for physical education teachers in the elementary schools and two for parent education. An additional period will be open for handcraft lessons and another for kindergarten teachers.

Some authorities predict that soon the radio will be as familiar a part of schoolroom equipment as the blackboard and the desk. The teachers who are developing the Cleveland station WBOE have reached no definite conclusions yet, but they hope to make a worth while contribution to the development of this medium.

Ohio's largest public school system has pioneered, also, in many other fields: special schools for the deaf and the crippled; special classes for the undernourished, the tuberculous,

the hard of hearing, the mentally slow and the mentally gifted child; vocational and safety education.

For more than fifteen years Cleveland has been providing real opportunities for the brilliant boy and girl from whose ranks the leaders of the next generation may come. Major work or "high I.Q." classes have been developing steadily, until this year they enroll 1208 of the system's 136,000 children.

In the field of vocational education where the Cleveland Plan for apprentice training is conducted, the Cleveland Trade School for Boys and the Jane Addams Vocational School for Girls are outstanding in their achievements.

In safety education, a subject that is receiving attention throughout the nation at this time, Cleveland has been stressing instruction in the elementary schools for many years and in the last few years has extended the course of study to include the secondary schools. The most recent safety course added to the secondary school curriculum is driver education and training. This course includes both classroom instruction and actual road work in dual control cars.

The program that has made Cleveland one of the outstanding language teaching centers of the country was begun about twenty years ago. Starting with definite basic principles, the modern language department of the schools, with the summer school of Western Reserve University as the testing laboratory, has developed a multiple approach to satisfy the fourfold aspects of language: speaking, reading, writing and understanding. The basic principles remain unchanged, but improvements in application are being developed constantly. No conclusions arrived at by scientific testing have yet been invalidated, department heads maintain.

"The greatest compliment that visitors have paid us," says Dr. E. B. deSauze, director of foreign languages in Cleveland, "is to say that our courses of study do not overestimate the achievement of the children." The department of foreign languages has used the radio in developing correct speech. It has developed courses of study adapted to the bilingual needs of children from homes in which a foreign tongue is

spoken, and it has established courses in foreign background for senior high pupils who do not elect a foreign language.

This year the Cleveland schools are offering junior high school children an exploratory course in languages. It features several modern languages, presented alternately by specialists, so that an intelligent choice may be made by the pupil.

Nationality programs in the schools have had a noticeable effect in overcoming the prejudices of one race against another. Three schools have made surprising contributions in this field: Harvey Rice Elementary, Myron T. Herrick Junior High and Collinwood High, a six year school.

Last year packed houses attended Bohemian Night and Polish Night programs at Myron T. Herrick Junior High School. The programs were pupil projects, presented after many weeks of planning by the pupils of each nationality for the benefit of all the pupils of the school and their parents. Attics were ransacked and colorful costumes brought to school, with heirlooms and old country mementoes. Programs emphasized the dances, music, art, culture, customs and mode of living of the school's two largest foreign language groups. Geography and history were represented, and native foods, prepared by the children themselves, were served to pupils and their

guests, parents, neighbors, consular representatives and civic leaders.

The reaction of the school to this activity was typified by the boy who said, "Well, those people have got something, after all!" The aim of such programs is not to make the pupil a better Bohemian but to make him an American citizen who will understand the customs of his parents and have a real respect for them, and who will appreciate the characteristics of his Polish, Hungarian and Italian schoolmates.

Almost every child will enjoy the music of Franz Liszt but he will not know, perhaps, that Liszt was a Hungarian. Tell him about the Hungarian contributions to art, literature and science, and he will be less likely to torment the children of Hungarian parents with cries of "Hunky!" or to feel inferior if he is Hungarian. That has been Cleveland's experience with these projects, which serve also to motivate the teaching of various subjects such as art, music, history and science.

The problems of education in Cleveland are similar to those of other cities of the United States. There is nothing unusual about Cleveland's accomplishments in public education. Cleveland is simply trying to spend each tax dollar allotted to education in the way that will produce maximum returns in education and citizenship.



Radio in the English classroom.

Equitable School Housing

ARTHUR H. RICE

FEDERAL funds for school building activities have averted, at least temporarily, what might have been the most acute school housing situation in the history of American public education. In most states, the depression and recession made such heavy inroads into local and state revenues for schools that virtually all available funds have been used for operating costs and debt service and little or none for school building programs. While funds decreased, the school population increased tremendously, especially in the high school. The net result was more children in school, for more years of training, under crowded and inefficient school housing conditions.

There is increasing prospect that federal aid for school buildings will do more than merely alleviate present exigencies. It may become a permanent and vital factor in the total financial picture. If aid for building programs is increased, as now seems likely, public schools have an opportunity to lighten their capital outlay, thereby releasing more local and state funds for an adequate instructional program.

The importance and extent of federal funds for school buildings, through W.P.A. and P.W.A. grants, are shown in reports from 43 state education associations. The most significant fact about the school building program in these states is expressed by the phrase that occurs frequently in the reports, "due to federal aid." Another significant fact is that in those states in which federal aid provides the only funds available, the school housing program is still acute or considerably behind a normal development.

It should be recognized that federal funds originated from the states and the "handouts" have not been according to any accepted plan of reimbursement or equalization among the states. "The opportunist" meth-

od of allocating aid has resulted in a spotted picture. Some states have been able to benefit tremendously from federal grants, while others have picked up little from the federal windfall, either because of local restrictions on taxes and on bonding, or because of the ineffectiveness of local initiative.

The school housing situation seems to be the worst in Nebraska, West Virginia, Iowa, Georgia, Illinois, Indiana, Michigan, Mississippi, Arizona and Vermont. In the home of the Cornhuskers, "total expenditures for capital outlay in 1936-37 were only 5 per cent of the total school expenditures. School building is virtually nonexistent except for a few localities that have obtained P.W.A. or W.P.A. grants." West Virginia reports that "school building needs are critically acute. School districts (the counties) are slow to vote bonds

where W.P.A. funds are available, is absolutely at a standstill. We do not know just now of any school building that is being erected anywhere in the state by local and state aid alone." Illinois, Indiana, Mississippi and Michigan also report a serious school housing situation, with the building program almost entirely dependent upon federal grants.

An entirely different picture, however, is described by California, Oklahoma, Connecticut, Kansas, Louisiana and Minnesota.

California reports that "during the last two decades the status of school plants in California has been enormously improved." In Kansas, school building is more extensive than before 1930. Nearly every town of fair size is building one or more schools. "We have liberal laws on bonding for building." In Louisiana, "much building is going on. Parishes and districts within parishes are allowed to vote bonds for building purposes."

The answer to the educational furor over federal subsidy to education probably is in the equitable distribution of funds for school building construction, a survey of school housing in the various states reveals. This is the third of a series of articles by Mr. Rice voicing the opinions of state education associations

even with P.W.A. funds attractively available. The 'give me' attitude of many localities in relation to the state is also a detriment to successful elections. It is believed that some improvement of local opinion on this subject is beginning to appear."

Referring to the locally financed building program, Iowa states tersely, "There is none." Vermont reports likewise, except "in cases of one teacher schools." Arizona states that its building program "is approximately five years in arrears." The report from Georgia reads: "The school building program, except

New York, Texas and Kentucky report much building activity.

A few states have provided direct aid or encouragement to school districts for capital outlay or building programs, but a greater number have imposed restrictions or hardships, making it virtually impossible for local districts to pursue any reasonable building schedule. In fact, some of these restrictions make it difficult for school districts to raise the necessary funds to match W.P.A.

Arkansas, Minnesota and Montana are examples of states that are receiving some form of encourage-

ment or help from the state government. Arkansas has a state fund, known as the revolving loan fund, which has aided in school building programs. In Minnesota, "the income tax is earmarked for debt service and consequently acts as a stimulus for additional building, since such receipts alleviate the burden of any outstanding indebtedness."

In Montana, the state permanent school fund can buy all bonds and bonds may be issued for twenty years or less on either serial or amortization plan. In all three of these states, the building situation is reported as "good" or "generally satisfactory." Washington has provided direct state aid from the state's general fund to qualify for W.P.A. school building projects. Ohio reports that "the state has suspended its policy of giving assistance for capital outlay costs to local districts having meager resources, with the result that district reorganization and the elimination of small schools have been retarded."

Among the states reporting taxing limitations or bonding restrictions, which are adversely affecting school building activities, are Utah, New Mexico, Arkansas, Michigan and Washington. The report from Utah shows that "bonded indebtedness is limited to 3 per cent of the assessed valuation in cities of the first class and to 4 per cent of the assessed valuation in all other districts. Within these limits, the building program depends upon the will of the people. A few of our poor districts are having difficulty in getting buildings because the tax rate must be extremely high in order to finance the program. In spite of this situation, however, school building is going ahead fairly satisfactorily because of federal aid."

In New Mexico, "bonded indebtedness is limited to 6 per cent of assessed valuations," but in that state, too, the building program is said to be moving along "fairly satisfactorily." In Arkansas, "7 per cent of the assessed valuation is all that may be voted for bonds." Washington reports that "the financing of school buildings from local levies is generally impracticable for the reason that the tax limit law allows no levy above the 10 mills (for current use) for payment of interest and retire-

ment of bonds voted since passage of the first limit law, except by difficult special election."

Michigan's chief difficulty comes from the fact that bonds for school building purposes may not be stretched over more than a five year period. A large number of school districts are further handicapped by being under a 15 mill total tax limitation covering all governmental services. North Carolina's building program has been slowed up some, "but nearly all of the building program was well under way when debt limitation got into the state constitution."

There is increasing suspicion in Michigan and probably in other states that considerable state aid originally intended for teachers' salaries is being diverted to bondholders. Alabama is trying to prevent such a situation through its warrant act passed by the last legislature. Under this act, "indebtedness of city and county boards of education is controlled by the state board of education. This serves to prohibit indebtedness from curtailing school terms and otherwise jeopardizing the efficient operation of the schools."

One of the points in the legislation program of the Illinois Education Association is the recommendation

that 75 per cent of state aid be assigned to "instructional purposes."

A few of the states indicated a preference for P.W.A. grants as compared to W.P.A. grants. Although reasons were not given, it is generally believed that P.W.A. grants are more satisfactory because skilled labor can be employed, whereas W.P.A. projects employ labor only on a work relief basis.

Colorado reports that "W.P.A. grants have proved unsatisfactory. Higher institutions are launching a ten year building program partly financed by P.W.A. and partly by a 1 mill levy on property of state. Denver is planning a \$5,000,000 program of extension and additions."

Apparently the safest, most certain and most practical method of federal subsidy is in the provision of funds for school buildings. School interests might well concentrate first on national legislation to provide an equitable basis for the distribution of federal funds for school building construction. Perhaps legislation could minimize the "work relief" and "expediency" motives of the present setup and would make possible a balanced, nation-wide school building program "for all the children in all the states." Perhaps!

Junior College Is a Copycat

HARL R. DOUGLASS

THE two year junior college, which has been increasing so rapidly in number in the last twenty years, is not the type of institution the original proponents of the junior college idea had in mind and is not fulfilling the major functions that it was intended to serve.

Most two year schools have made little provision for their terminal function of serving the youth who will not go on to professional or advanced liberal arts training at the university. Few vocational courses are above high school level.

Instead, the two year school has aped its four year older brother, content to be a substitute for delivery of the same product, however inappropriate for its peculiar clientele.

Headed frequently by a "dean," its nonvocational program is an imitation of the courses of the first two years of the college, and its educational philosophy, in accordance with that practice. The "better articulation" function has largely ignored the duplication in courses in physics, chemistry, literature and history taught in grades 11 and 12 and again in grades 13 and 14.

In addition to its failure to make good on these two major functions, the two year institution is uneconomical. It calls for duplication of the laboratories, shops, gymnasiums and auditoriums used only part time in the smaller high schools. The two year junior college is an example of a sound idea gone wrong.

More Legal Problems of Nonpublic School Support

IN TWO previous articles, findings were reported relative to the nature and kinds of constitutional clauses prohibiting the use of public funds for nonpublic schools as well as court decisions and statutes involving indirect forms of aid to such schools and involving issues concerning religious influences in public educational institutions. In this article, other forms of indirect aid to private and parochial schools will be discussed, together with court decisions and statutes dealing with direct forms of aid given to the nonpublic schools.

The indirect forms of aid not previously considered comprise a variety of items found in cases and existing statutes. When a municipality leases its water system to private persons for a term of years and it is agreed in the lease contract that the lessee shall furnish water free of charge to all schools in the community, it has been held that such contract does not violate a constitutional provision against the use of public credit or property in aid of any school controlled by a sectarian denomination because the owners of the water, not the municipality, agree to supply this product to all schoolhouses.

A Municipality Is Different

But when it is stipulated in a contract that the company shall furnish a reasonable quantity of water to all schools in the community in consideration of hydrant rental to be paid by the municipality, such payment of hydrant rental is a use of public funds for the benefit of a parochial school and consequently is unconstitutional.

A school district may furnish light at public expense for a schoolhouse, however, although in so doing an incidental benefit is derived therefrom by a private academy. A district also may permit parochial school children to attend a public school

L. W. KINDRED

manual training class without violating any constitutional provision against public aid to sectarian educational institutions. Likewise, benefits may be paid to war veterans for the continuance of their education and the payment of such money to nonpublic schools as tuition is not unconstitutional.

Some statutes providing indirect forms of aid to private and parochial schools also may be classified as regulatory measures passed in the interest of public welfare. Thus in six states statutes were found providing medical inspection and examination for pupils, teachers and other employees in all educational institutions. In eight states, the superintendent of public instruction is required to supply to all schools in the state books or courses of study treating of fire dangers and the prevention of fire wastes.

Statutes permitting the payment of public money as tuition to private and parochial schools are herein considered as direct forms of aid to such schools. Statutes exist in seven states allowing towns and districts not maintaining schools of suitable grade to contract with private educational institutions and to pay tuition for the schooling which they furnish to children from these towns and these districts.

In states in which cases have been heard under statutes permitting payments of tuition to private schools, it has been held that a school district is liable for tuition paid by a parent to a high school in an adjoining town subsequent to a vote of the district to contract with an academy and also to pay the tuition of pupils who continue to attend the high school; that the pupils who receive instruction

from a private school are not liable for the tuition fees if they neither requested such instruction nor promised to pay for it; that the institution furnishing the instruction, under an agreement with the district, cannot maintain an action against the pupil's parents, and a parent cannot maintain an action against a district for tuition paid by him to a private school following the graduation of his children from an approved high school of the district; that the school board of a town bordering on a state line, in which no high school is maintained, may approve an academy located in another state, on grounds of accessibility, although similar schools in the home state are geographically nearer the pupil's residence, and in the exercise of a reasonable discretion, the board may revoke such approval before the completion of the full course of study prescribed therein.

It has been further held by the courts that a school district not maintaining an approved preparatory school is liable for tuition in the grammar grades of a junior high school furnished by another district in conformity with permissive statutes, and that a school receiving pupils under provisions of the statutes may maintain an action in its own name against the town in which the pupils reside to recover tuition for such pupils.

Cases Not Under Statute

In states in which cases have not been heard under statutes permitting payments of tuition to private schools, it has been held that the legislature may not authorize a private educational institution to take over the common schools of the district and to draw one-half of the public school money; that the legislature may not appropriate part of the common school fund to a private school by relieving the parents of children at-

tending the school from taxation for the maintenance and repair of the common school buildings, nor can the legislature permit *pro rata* shares of the school fund to be given children attending private schools; that under a constitutional clause prohibiting the appropriation of public funds to sectarian schools, a state may not pay tuition fees of pupils to a denominational school although territorial laws permitted such contract prior to the adoption of the constitution; that the trustees of the public school are without authority to enter into an agreement whereby the public school is brought under the direct or indirect influence or control of any sectarian institution, and that a county superintendent cannot authorize payments of tuition to a parent whose children attended a parochial school under a statute permitting a school district to arrange for the schooling of pupils when the common school of the district has been discontinued.

Somewhat analagous to the questions raised concerning payments of tuition to private and parochial schools are the issues involving appropriations of public funds to charitable and corrective institutions not under the exclusive control and management of the state.

No Taxation Without Supervision

Courts considering the question of whether public funds can be appropriated for the benefit of orphan asylums have held that a municipality cannot exercise its power of taxation in favor of a charitable institution over which it has no supervision or control, particularly under a constitutional prohibition against the use of public money in aid of a sectarian purpose; that such institutions cannot share in the distribution of the common school funds since they are not "common schools" within the meaning of that term as it is used in the constitution, nor can salaries be appropriated by the legislature from the general school funds for teachers in such institutions even though they are under the control of the state.

Moreover, a board of education in a district wherein an orphans' home is located is not required to admit inmates to the public schools of the

district free of charge as they are not children, wards or apprentices of actual residents of the district. However, under a statute authorizing orphans' homes to share in the distribution of monies raised in cities and districts for school purposes the same as public schools in the respective districts, payments made as salaries for teachers in a sectarian orphans' home from funds raised in the local district are not unconstitutional, and when the orphans' home does not maintain a school, every child of school age living in the home is entitled to attend the public schools in the district in which the home is located whether or not such home is his place of legal residence.

Payments for Juvenile Care

In cases involving payments of public money to juvenile corrective institutions, it has been held that such payments are constitutional when they are less than the actual cost of the services furnished by the institution to its inmates, and that a statute directing counties to pay maintenance costs for juvenile delinquents committed by county courts to nonsectarian corrective institutions is constitutional.

The doctrine of educational services furnished in return for benefits received has been given little or no attention in decisions dealing with taxation and appropriations of public money and land in aid of schools controlled by private corporations and church associations. With the exception of Maine and Vermont, in which state aid to private schools is provided by law, cases have come up under constitutional provisions and statutes expressly prohibiting the use of public funds for nonpublic schools. The courts have ruled that any act of a legislature that authorizes a municipal corporation to levy taxes in the interest of a private educational institution is invalid although incidental benefits result to the people of the community in which the institution is located; when such taxes have been levied, they are recoverable.

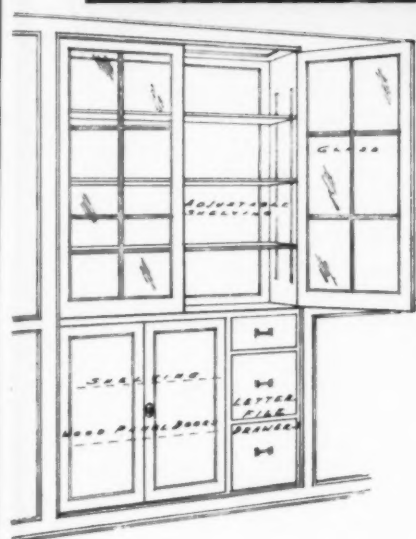
On the other hand, it has been held that a town may levy a tax for the construction of a school building and give a perpetual lease of the same, without payment of rent, to a

private academy as the implied conditions of the lease adequately protect the public interest. However, under a constitutional clause forbidding appropriations of public funds for nonpublic schools, the legislature is without authority to authorize a town to raise money by taxation for the construction of a school building and the support of a school founded by a charitable bequest that vests supervision and control of the school in a private board of trustees, or to make a direct appropriation of public funds to a private academy which is managed and directed by a board of trustees that is in no way accountable to the legislature for the distribution of such funds. Furthermore, direct or indirect appropriations of public money, land or credit cannot be made by a legislature or any municipal corporation for the benefit of an institution directed or controlled by a sectarian denomination.

The findings that have been presented represent a concise summary of the law with respect to the use of public funds for nonpublic schools and issues concerning religious influences in public educational institutions. These findings are based upon a comprehensive and detailed analysis of constitutional and statutory provisions as well as upon court cases and decisions. They should serve to bring about a better understanding of the significant legal problems involved in the question of public support of elementary and secondary private and parochial schools.

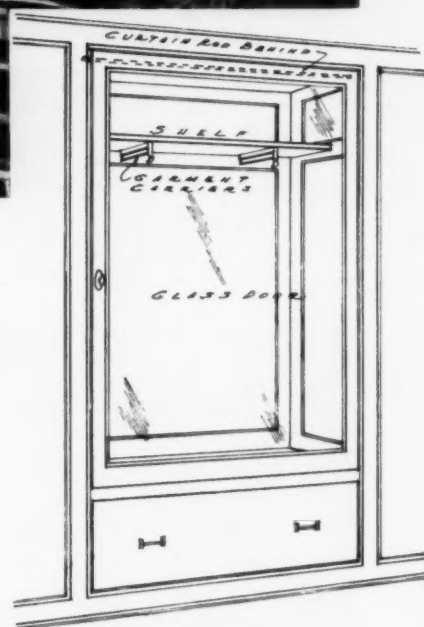
Educational Conditioning

When Germany, Italy and Russia set out to build a new and vital society their leaders realized that this purpose could not be achieved unless there was substantial agreement among their citizens as to the basic principles upon which they were to operate. Such agreement cannot be reached among adults who have been conditioned in various and conflicting directions. It can be built only through education, through conditioning in one central direction from early childhood. Hence these countries did not hesitate to use education to organize their societies upon a new basis.—From *Issues of Secondary Education*, N.E.A.



High School Interiors

WARREN S. HOLMES



DEPARTMENTALIZATION is well-established for the secondary school. There is need to create added interest in academic subjects in order to give them an appeal that corresponds to the interest engendered by the practical phases of a vocational course.

It is now recognized that social implications and character development are to be placed on a par with learning. The creation of desirable attitudes and intrinsic interests for pupils becomes as important as the curriculum offerings.

This philosophy of education requires school buildings that emphasize environments designed to promote health, to provide recreation, to stimulate the attitudes and emotions that foster character development and provide for learning.

The design of entrances, foyers, corridors and classrooms assumes a

new importance in this philosophy of school building. The entrance can be made far more than simply a means of ingress and egress. It may be designed to welcome those who enter, enticing them on into a foyer made especially inviting to the intellectual curiosities of adolescence.

The architectural appeal of attractive floors, walls and ceilings, of a trophy case, of a bronze plate with its interesting inscription, of an attractive lighting fixture and of a display of school work in exhibit cases has its justification in the minds of the architect and school administra-

Above, center: Convenient books and magazines create a literary environment. Left diagram: General purpose case. Right diagram: Detail for classroom exhibit case.

tor. But far more important is the strong appeal made to the pupil by such features. The foyer is justly made the beauty spot of the building because the modern school endeavors to avoid any feeling of compulsion. It seeks to appeal to the child, to interest him and to convince him that his school is the most attractive spot in the community.

Too often the design and function of the foyer are entirely misunderstood and it becomes cold, formal and without purpose. The foyer should be attractive, interesting, convenient and definitely tied up with school uses. Built-in seats, exhibit cases and bulletin boards will tempt pupils to stop and chat with their friends before they proceed to their classroom workshops.

No school foyer can truly function as a "Welcome Hall" that does not give a view into at least one office in

which friendly contact can be made with the principal or with some responsible teacher. It is a sad commentary on our school system that it has taken so long for educators to realize the value of social contacts between pupils and the administrative staff.

The foyer in the school building of a few years ago was often looked upon as waste space. With its new purpose and with new architectural treatments resulting from new viewpoints, it becomes one of the most effective and most educative rooms in the building.

This philosophy of the entrance and foyer logically carries over into the corridors if they are to become more than simple passageways between classrooms. Corridors form ideal wall spaces to build in lockers for storing books and clothing. They also offer unlimited opportunity for the display of art and for the effective

use of bulletin boards and exhibit cases.

Certain departments, such as the gymnasium, auditorium and shop, inherently possess characteristic environments. This quality is equally important for the academic classrooms and not difficult to achieve once a study is made of the underlying philosophies involved.

A literary environment is most valuable in the study of language. As one of the fine arts, literature enjoys prestige in appropriate and pleasing surroundings. English is not simply a body of facts concerning language to be examined and reported on. It is rather a means of thinking and a way of doing. The designers of the English room, therefore, succeed best when they create a literary atmosphere conducive to the development of literary talents and interests.

Books and magazines, carefully selected to stimulate the pupil's

interests, must be placed to invite handling. The appearance and atmosphere of a small library are ideal. A good color scheme, good proportions in the design of cases, blackboards, tacking spaces and wall paneling, with a pleasing play of light and shade, are important factors in producing literary interest in the English classroom.

The furniture can add much to the beauty and comfort of this room. A few good pictures of literary interest, photographs, or illustrations clipped from magazines and biographical sketches of contemporary authors posted on the bulletin boards are strategic and compel pupil interest in the better modern writers.

Other desirable features, such as the stage, the reading corner and architectural detail conforming to certain well-known literary periods, may be used effectively in constructing literary environments.

The history classroom lends itself most readily to environmental treatment characteristic of the subject matter. It may well be made a sort of historical museum for which there is available an endless quantity of material suitable for collection and exhibit.

History cannot be taught in the abstract; there must be things for



Left: Creative activity permeates this crafts room, designed for the development of skills. Below: An office that is visible from the foyer fosters social and business relations of staff and pupils. Lower left: A display case that has strong appeal for the pupil.





Right: The history room's wall cabinets and furniture combine the human touch of today with the past. Above: Printing is one of many practical vocational courses. Above, right: The stage, reading corner and architectural detail of the English room are in the pupils' minds reminiscent of the great periods in literature.

children to do, things for them to handle. The plea here is not alone for the atmosphere created by the display of casts of ancient and little understood art but rather for a room filled with comfortable tables and chairs, interesting books and modern historical magazines, changing exhibits of historical relics or antiques sponsored by the history club, and clippings on the bulletin boards from daily newspapers or news magazines.

No words of teacher or textbook can stir the pupil's imagination or make an appeal equal to the classroom that actually emanates a historical atmosphere. Each year, a history room thus designed becomes more interesting, more efficient and more modern, as its properties and equipment are added to by subsequent classes and community residents.

The idea of planning the environment to suit the subject matter applies equally well to classrooms designed for science. The scientific attitude is one of the child's most valuable acquisitions. Next to the natural laboratories of field and forest, the scientific attitude is best cultivated in a good science classroom in which experimental apparatus and scientific books and magazines of compelling interest are in evidence.



Ample display space, much of which is behind glass doors, plenty of storage space, good work tables, an aquarium, a conservatory and an instructor's demonstration desk are necessary equipment. Scientific and nature magazines, exhibits in biology, physics and agriculture, and work projects by pupil groups, if systematically arranged, give the science room an atmosphere that generates pupil interest.

Discontent with the old methods of study and recitation is general in secondary schools as well as in the grades, notwithstanding the fact that they served the last generation reasonably well. High school pupils were then of highly selected intelligence as compared with the motley group of today. Many secondary school pupils rebel and refuse to work or profit from classroom work void of pertinent interests; this, in

turn, seriously slows up the progress of classes as a whole.

The obvious solution is to inject new interests into these classes by improvement of teaching methods and environment. If the environments are to make a definite contribution to classroom interest, they must tie in closely with the classroom procedures. The invariable result is an environment that is characteristic of the subject matter. Recitation rooms for English, language, mathematics and social studies are no longer identical.

One does not have to read the schedule on the classroom doors or to be told what is being taught in different recitation rooms; it becomes evident at a glance because the details of the environment created by architect, teacher and class reveal clearly some of the interests created for this department of knowledge.

Operation and Maintenance

Repairs on the Roof

LESTER B. ROBERTSON

ROOF building presents a three-fold problem: (1) purchase of proper roofing materials, (2) application of these materials by reliable roof builders and (3) qualified supervision of the work.

Frequently roof trouble arises from improper roof design, for in different sections of the country different types of roofs are required. Another difficulty lies in the selection of roofing material and its application. Roof materials made by a reputable firm and properly applied are a definite requirement in economical plant maintenance.

The two most common types of roofs adapted to school buildings are the asphalt built-up roof and the tar and gravel roof. The first is built up with 30 and 15 pound felts, saturated and bound together with asphalt. The second is built up with felts of the same weight, saturated and bound together with tar. The final surface application is covered with roofing gravel, because of the low melting point of tar.

Advantages of Flat Roof

What type of roof design is economical to maintain? The flat roof, built up with a four or five ply of good grade felts, properly laid and protected with a penetrating, elastic, waterproof and weatherproof coating, is one of the best types for schools. It is more economical to maintain, as an uneven roof generally requires three times as much material for construction as a smooth one and also is more difficult to repair when damaged. Any type of roof with dormers, gables and skylights is difficult to maintain in northern climates because of the alternate thawing and freezing of snow and ice.

Roofs do not wear out; like soft pine floors, they dry out. Constantly subjected to sun, rain, wind and

snow, they eventually become inelastic; cracks and breaks begin to appear. Often when a roof gets in this condition, the official in charge buys a barrel of black dope, called roof coating, and has it mopped over the roof in an effort to form a waterproof seal. In the end the material beneath the coating is little different after such an application than before.

Practical Method of Repair

Is it possible to preserve what is already there? Yes, provided the undercoating is in good condition or the deck of the roof has not rotted away. If both undercoating and deck are in good condition, except for a few dry spots, tiny checks, cracks or a broken seam, it is better to repair and recoat the roof immediately. If the job is postponed for a year the expense will be much greater. The same holds true when the flashing around the firewall, chimney or vent is torn away.

What, then, would be a practical and economical method of repair for such a roof. My suggestion is as follows: For the main deck of the roof, which is partly dried out and shows tiny checks and cracks, apply a coat of high grade flexible and penetrating roof coating. Allow this application to dry for four days, then, if necessary, apply a second coat.

Cracks and tears may be re-enforced with heavy unbleached muslin having a weight of 1 pound to 4 lineal yards with a weave of from 50 to 60 threads per square inch. Prior to application, the muslin should be soaked in clean warm water for twenty-four hours, to remove the sizing and to cause preliminary shrinkage. The wet muslin should then be placed upon the wet cement, allowing small ridges in a few places to permit contraction and expansion.

A coat of asphalt should be thor-

oughly brushed over the fabric. Care must be taken not to leave any air bubbles. If the cement is brushed well into the pores of the muslin, it forms a permanent waterproof membrane. The muslin patch is thus completed. However, to obtain maximum results, another coat of asphalt should be applied in thirty days or so completely to ward off the appearance of cracks or open seams.

Many school roofs are now being referred for repair to the P.W.A. Before this is done, serious consideration should be given the job by board members and the superintendent of buildings. Inexperienced men, assigned to a roof repair job, should not be allowed to lay felts or to apply coatings. These must be applied in the proper manner and to a surface suitable to receive them. Most school roofs listed for repair are discovered when water leaks down on a finished hardwood floor. Such leaks usually necessitate patching or resurfacing the entire roof.

Regardless of whether a roof is built up with four or five ply, its life depends upon the amount and quality of asphalt each square foot of roofing contains.

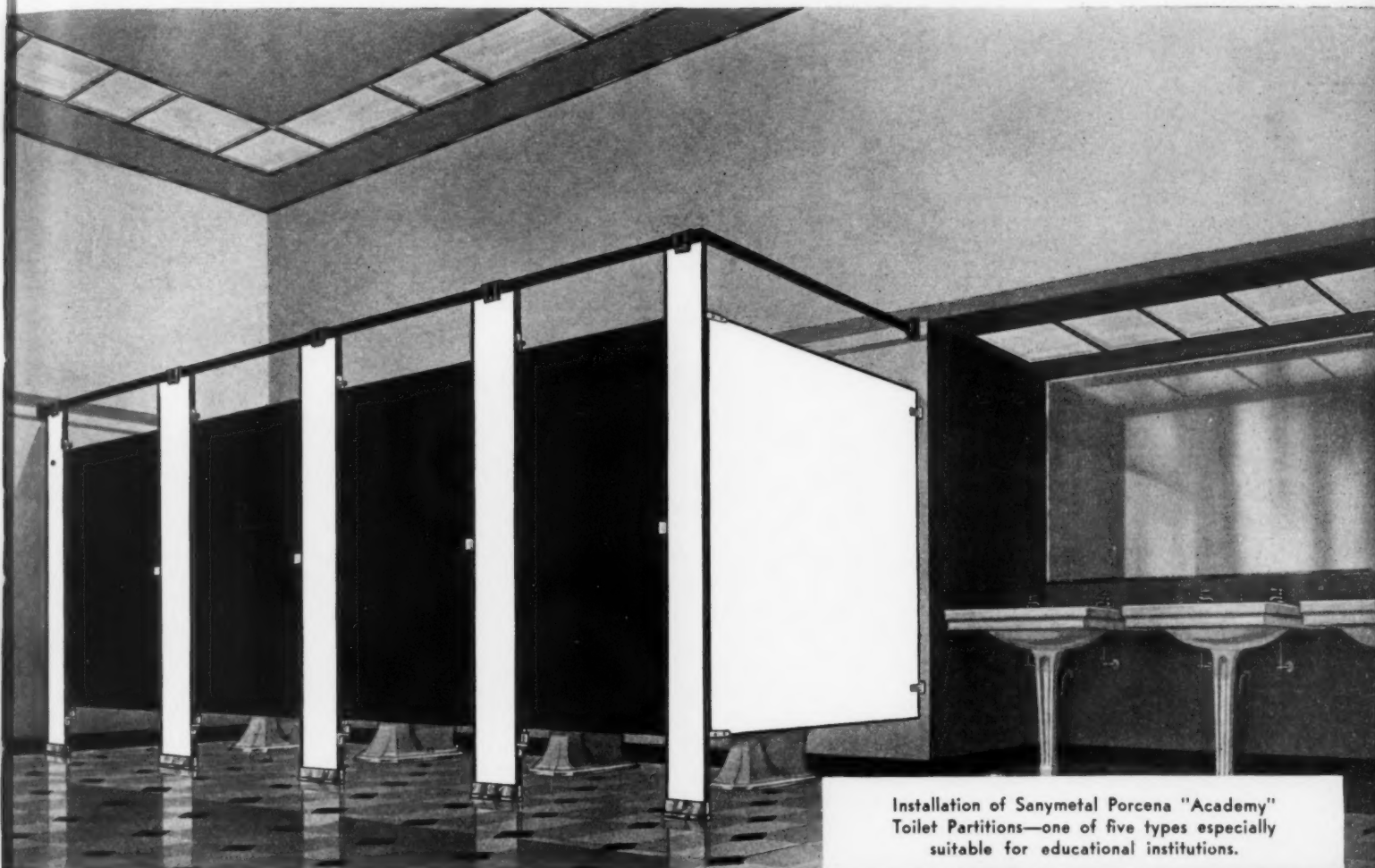
Advance Planning Necessary

Contractors charge approximately \$15 per one hundred square feet on a twenty year guarantee. Too many contractors fail to do the job well enough to fulfill even half the time of their guarantee. The work of contractors, like the work of other human beings, is rarely 100 per cent efficient; there is always room for improvement. This also applies to P.W.A. skilled labor.

There are ways in which money invested in school roofs can be conserved, even though under a P.W.A. project the schools need supply the cost of the material only. This year, under Senate Bill No. 3529, many school roofs are being rebuilt or repaired. If a careful study of this subject is made in advance, the job should far outlast a reasonable return on the money invested in it.

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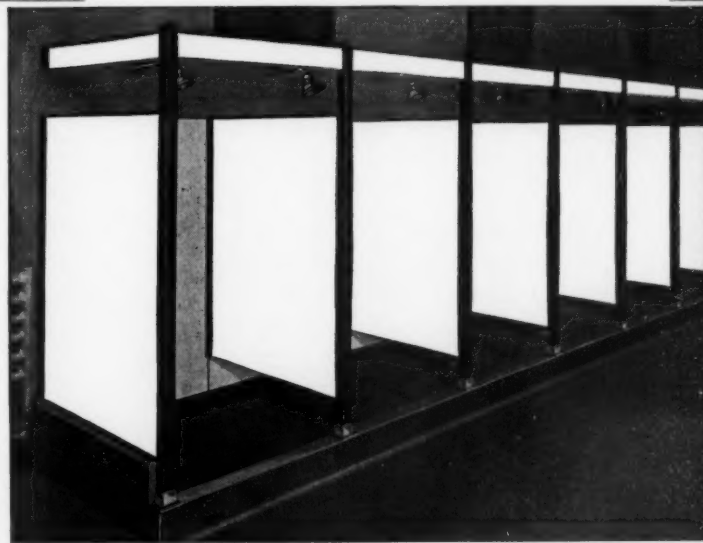


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BETTER PLANT PRACTICES

Toilet Paper Again

Which is preferable for school use, interfolded toilet paper or the rolled type? Again the question is asked, and again in come the answers with strong claims made for both. As was true last month opinion is about equally divided, the weight of favor resting possibly on the side of rolled tissue.

In using the rolled type, much depends upon the fixture. It must be foolproof or playproof. This point, brought out in the discussion last month, is raised again by John W. Brown, business manager, board of education, Elizabeth, N. J. But first it should be said that Mr. Brown believes that roll toilet paper is far better and cheaper than the interfolded type.

"We have tried the interfolded type," he says, "and find that the children continue to pull the next sheet to see the cabinet work. It has been necessary in using the roll paper to purchase a special holder that prevents the children from pulling the roller and allowing it to unroll of its own accord."

Cutting Towel Costs

Although he has no figures of comparative costs to prove his point, O. D. Neill, business manager at Boulder, Colo., is just as strongly in favor of interfolded toilet paper. He feels that it is not only more economical but far more sanitary. Mr. Neill also offers a good suggestion for cutting the size of towel bills. He does this by buying the senior size towels and cutting them in two for the elementary schools. The result is 25 to 40 per cent off the bill.

12 Cents per Pupil

As long as we have diverted briefly to the subject of towels, Walter McLain, secretary, board of education, Ottumwa, Iowa, points to an average cost of 12 cents per pupil for towels, that is, 8 cents per pupil in the grades and 20 cents per pupil in the high school. In the high school cabinets are installed for folded towels, but roll towels continue to be used in the elementary and junior high schools. It would be interesting to check these costs with

towel bills in other school systems.

Now to continue with our discussion of toilet paper. Mr. McLain reports that 2 1/3 cents a year is the toilet paper cost per pupil in Ottumwa. "Comparing this with the proportional amount spent per year in the average home," he states, "we find this an economical expenditure, taking into consideration that children are in school about one-fourth of their waking and sleeping hours."

"We use 2000 sheet unbanded 10 pound tissue, 4 1/2 by 4 1/2 inch sheet," he adds, "packed in sealed cases, 50 rolls to a case (\$2.74 cost)."

Buying Specifications

At this point it might be well to make note of the specifications for toilet paper included in the Federal Standard Stock Catalog that may be obtained from the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C.:

"Tissue toilet paper shall be of one type and weight only, perforated rolls.

"*Weight:* Basis 25 by 40 per thousand, not less than 28 pounds (24 by 36, 480-11.6 pounds).

"*Bursting Strength:* Average for five sheets tested together, not less than 12 points.

"*Absorption:* Maximum time not more than 120 seconds.

"*Finish and Formation:* Shall be unglazed, soft and flexible, and shall be free from visible wood slivers, specks, holes, wrinkles and other imperfections.

"*Size:* Paper shall be 4 1/2 inches wide and perforated at 5 inch intervals so that sheets are easily detachable; tightly wound on a stiff, round pasteboard core having an inside diameter of 1 1/4 to 1 1/2 inches; outermost sheet to be pasted to the roll to prevent unwinding; 1000 sheets to the roll as specified in the invitation for bids."

Exit Broom and Duster

"The problem of cleaning and dusting in the modern progressive school is no longer answered through the use of the corn broom and feather duster,

but by the installation of a central vacuum cleaning system or wiring for the portable type." We are quoting from Lester B. Robertson, custodian in charge, Guernsey High School, Guernsey, Wyo.

"The portable type is particularly popular because it weighs only 15 or 20 pounds and can be carried to any remote part of the building. The cost of operation is about 1 1/2 cents per hour.

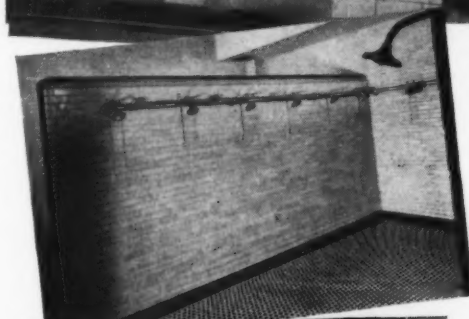
"It is a well known fact that dust, when disturbed and caused to float about in the air we breathe, acts as a carrier of germs and a danger to health. By vacuum dusting, the flow of dust laden air is drawn through the nozzle to the filter in which the dust is imprisoned in the dust bag and the air is filtered and delivered to the atmosphere.

"Flexible suction hose, 8 feet in length, and 50 feet of extension cord will enable the custodian to clean any type of surface. With a couple of extra wands he can reach any part of the room or a ceiling of normal height without the aid of a stepladder.

"Methods of cleaning and dusting efficiently and of carrying on the maintenance program are constantly being sought by the custodian. Greater speed is possible with the vacuum cleaner and waste motion is avoided. For instance, chalk trays, erasers, cork boards and pencil sharpeners, all may be cleaned within the length of the blackboard. In dusting walls, picture moldings, pictures, ventilators and radiators, buzzers, clocks, loud speakers, desks and chairs, the use of the vacuum cleaner is most desirable.

"In the music room, acoustical tiles may be cleaned by vacuum, as well as the rug on the floor, window draperies, the interior of the piano, the radio and microphone and the recording machine. Such equipment is dusted with a fine soft oval brush. Band uniforms, too, may be thoroughly cleaned and moth protected before storage.

"The school theater or auditorium lends itself particularly to vacuum cleaning. Stage curtains and upholstered furniture are soon rendered dustless through this method; the same is true of the library with the many hundreds of volumes of books and magazines. The cleaning of classrooms, offices, storerooms and many other parts of the building is not limited to vacation periods. They can be handled any cleaning period of the day."



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Children love showers, and after the violent action of the "gym period," a shower may well be considered a necessity from the standpoint of health and comfort as well as from the lesson in sanitation it imparts. But while

showers may mean fun to active, carefree youth, *their fun* may mean a "headache" for you when repair and replacement bills come in. Crane showers, like all Crane sanitary equipment, are designed to endure the rough usage that is to be expected in any school installation.

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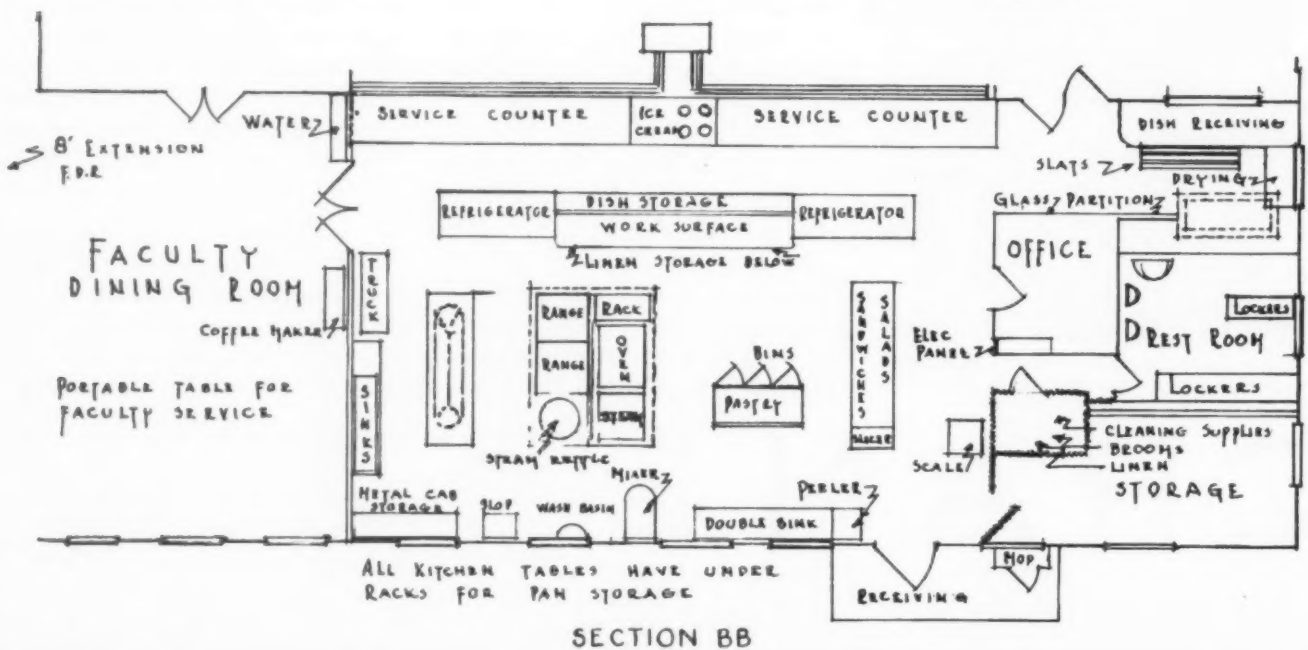
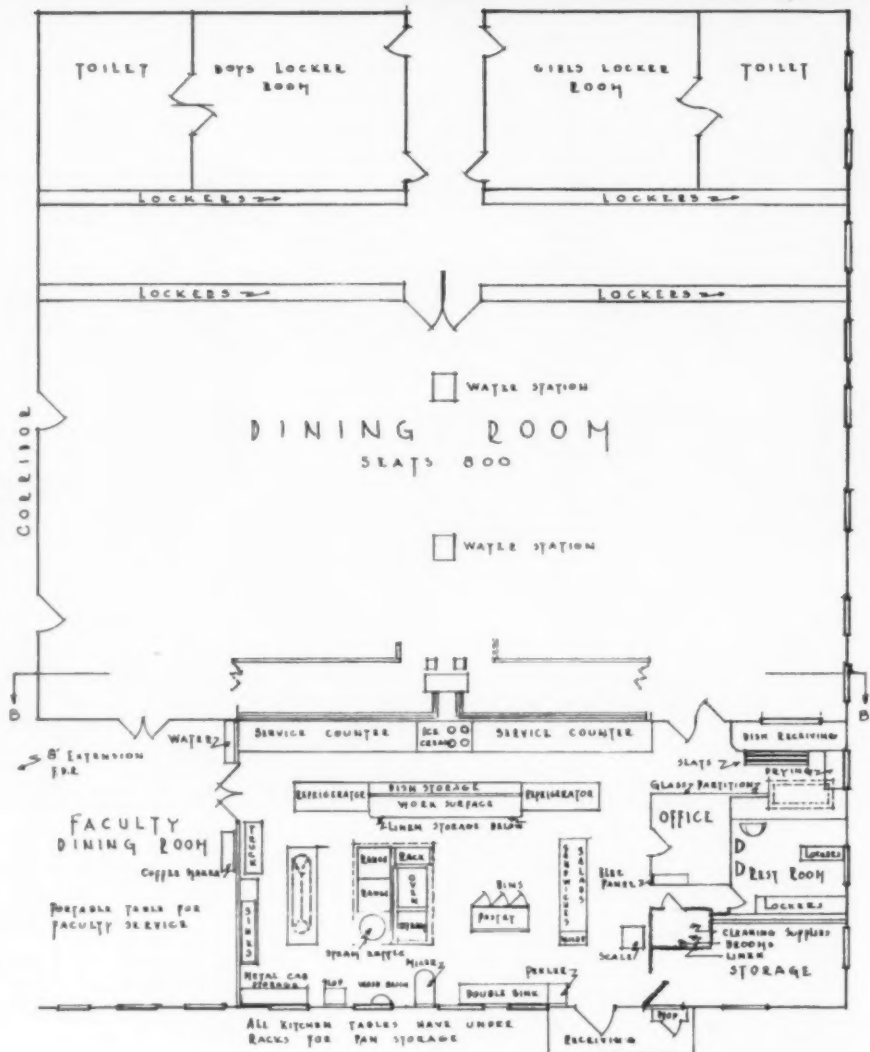
The School Cafeteria

CONDUCTED BY
MARY DeGARMO BRYAN

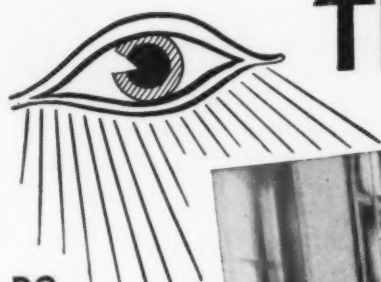
Lunchroom Planning

POINTS worthy of special note in the layout of the Macomber Vocational High School cafeteria, Toledo, Ohio, are as follows:

1. Location on the first floor with windows along one side of the dining area and two sides of the kitchen; accessibility to the outside entrance for receiving supplies; accessibility for pupil entrance on the two corridors.
2. Location of the toilet rooms and lockers from the entrance, and placement of additional lockers in the corridors adjoining the entrance.
3. Entrances and exits on two sides of the room to avoid crowding.
4. Good location of water coolers.
5. Two-way service with central location of ice cream cabinet.
6. Good location of faculty dining room, so that trays may be carried from the serving line into the dining room or a portable hot-table may be rolled into the faculty dining room from the kitchen, if desired.
7. Provision of a coffee-making at-



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tachment and water in the faculty dining room.

8. Location of the dietitian's office with its glass partition to give good control of the kitchen.

9. Storerooms with wire partitions adjacent to the receiving entrance.

10. Accessibility of rest room for employees to the kitchen but not directly into main part of the kitchen.

11. Placement of the vegetable sinks with the peeler opening directly on to one of the drain boards. This provides for the preparation of the vegetables near their point of entrance. Salad vegetables are then routed directly to

the salad tables; others, directly to the cooking section.

12. Compact layout of cooking unit, adequate but not excessive working space being provided. The cooking unit is so placed that the lines of traffic of workers are short and unconfused.

13. Location of mixer so that it is accessible to both baker and cooks.

14. Two-way opening of refrigerators on both the kitchen and service sides. With the dish storage shelves they form the only partition between the service area and the preparation area of the kitchen. This avoids the building of an extra wall.

Lessons From Lunch

LAURA H. HOCH

IF YOU would have your pupils choose good lunches in the school cafeterias, start your food education in the kindergarten! Lunch time in the kindergartens at Reading, Pa., is an event. Tables are cleared and hands washed before the children sit down to eat the mid-morning lunches that are brought from home.

For the first few days, some of the lunches contain everything from pickles to bologna. With the teacher smiling on milk, fruit and crackers and frowning on candy and sweet cakes, the lunches soon improve, for children at this age want to please the teacher more than anything else. Milk is sold at cost to those who wish to purchase it and, in some cases, the Mothers' Club furnishes milk to underprivileged children. During the story hour, health stories emphasizing good foods are told and food songs are sung.

Nutrition lessons are continued through the first six grades. Stories are told, games played, children are encouraged to eat breakfast before coming to school and are taught the composition of a well-balanced one. Good combinations of food for dinner and supper also are given in connection with the work in hygiene. In some schools, records are kept of the foods the children eat. The drinking of milk in place of tea or coffee is emphasized in each grade. Milk can be purchased by any child who desires it. However, it has been found that the largest amount is sold to children in grades 1 to 4.

Changing food habits is a slow process, hence nutrition teaching cannot stop when the child enters junior high school. It is continued in connection with the health teaching. In the senior high school a club has been formed, the members of which are below weight. These pupils meet once a week and are given information and inspiration to improve their physical condition.

Since Reading does not have cafeterias in its grade schools, the first opportunity the pupil has to select food is in the junior high school. In order to avoid correcting the children while they are in the cafeteria, everything is done to make it as easy as possible for them to choose a well-balanced meal. Posters and trays set with a good lunch are displayed. The food on the counter is arranged attractively, and the best foods for children are placed first.

When the pupil enters the cafeteria line, milk greets his eye. He passes the other foods in the following order: sandwiches, hot dishes, salads, fruits, desserts, ice cream, cookies and candy (a chocolate bar). Beverages are restricted to milk, chocolate milk and cocoa. A few plain penny cakes are found on the counter every day. Cake made in the cafeteria kitchen is sold for 4 cents a serving. Ice cream is sold in the form of a block.

Recognizing the benefit of a hot lunch, food sold from the steam table is stressed. About 95 per cent of the children purchase one hot dish

and 70 per cent, two or more. This is a higher percentage than will be found in the majority of school cafeterias, because Reading is a Pennsylvania German community in which the people like a substantial hot meal at noon, with a supper in the evening.

Platter lunches are served to aid the children in choosing good food combinations. In the junior high schools a plate containing a meat and vegetable or two vegetables can be purchased by the children for 7 cents. When the pupil has more money to spend, in the senior high school, a plate containing a meat and vegetable or two vegetables with a salad and buttered roll is sold for 12 cents.

It is easy to link the nutrition teaching with the school cafeteria because the nutrition supervisor in the Reading schools also is the cafeteria supervisor. She visits each grade school classroom once a year to tell a health story to the children and assists the teachers with any nutrition problems. The children know her when they come to eat in the cafeterias and feel free to talk with her about their food selection.

During September the average amount of money spent per meal in the junior high schools was 15.9 cents and in the senior high school, 18.2 cents.

Following are samples of menus that are served in the senior high school cafeterias:

Beverages

Plain milk 3c Chocolate milk 5c
Cocoa 3c

Sandwiches

Egg and lettuce 5c
Cheese and olive 5c
Whole wheat 2c Buttered rolls 2c

Hot Dishes

Vegetable soup 5c
Roast pork 6c Sauerkraut 5c
Mashed potatoes 5c

Salads

Banana and nut 5c Plain lettuce 3c
Tomato and egg 5c

Desserts

Lime-orange gelatin 4c
Ice cream 5c Chocolate sauce 1c
Bread pudding 4c
Tokay grapes 4c
Cakes, Candy, Pretzels 1c

One of the 12 cent platter lunch-con menus is as follows:

Roast pork
Sauerkraut Mashed potatoes
Buttered roll

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"TONTINE" shades are scientifically made to admit extra daylight without eye-straining glare. Laboratory tests reveal that No. 500 (Snow White) "Tontine" shade transmits 73% more light than a similar color in painted cloth . . . and that No. 508 (After-Glow Gray Green) lets in 140% more light.

"Tontine" shades are economical and durable. They won't crack, fray or pinhole! Rain won't hurt them! Sunshine won't fade them! And they can be washed clean-as-new with soap and water!

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Designed to give the utmost sanitation—smart, modern appearance—comfort and confidence to the user—it will fit your present toilet bowls. Note particularly the construction. There is not a single "hard-to-get-at" surface. There are no corners. Every surface is rounded. No cracks, screws or crevices . . . not a single spot for germs to lodge.

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- ☐ Please send specifications.
- ☐ Please have representative call.

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LEGALLY, a sales talk is often discounted as a statement of opinion rather than of fact. But our claims for the modern, practical, and comprehensive new text—**BUSINESS LAW FOR EVERYDAY USE**—are no mere "puff." They are well substantiated by many large adoptions in the few months since publication.

PRETZELS were given centuries ago to pupils in German monastery schools as rewards for good behavior.

FAULTY VISION is found in 5% of pre-school children. By the end of grade school, 25% have some form of eye defect that requires corrective aid . . . If there is a better *raison d'être* for the Winston CLEAR-TYPE Classics Series than shown in these figures, it must be the durability of their Hercules bindings or the universal popularity of their thirty-five titles.

MAN'S SUIT of good woolen fabric requires the shearings of two sheep.

CHILDHOOD experiences set the pattern for adult behavior of an individual. Similarly, past experiences of the human race are a key to an understanding of current history. **ON THE ROAD TO CIVILIZATION** presents the life story of the human race to high school pupils with emphasis on the social and cultural life of bygone days.

SURVEY of educational data in *Who's Who* shows approximately 74% college graduates, of whom one third hold doctorates.

OVER A SCORE of synonyms for happiness and happy are given in **THE WINSTON SIMPLIFIED DICTIONARY**, Advanced Edition—joy, felicity, bliss, pleasure, merry, gay, jolly, etc. May you be able to use every one of them—many times—during the New Year.

The JOHN C. **WINSTON** COMPANY
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News in Review

Textbook Ethics

A code of ethics for schoolmen and bookmen in Illinois, drawn up by a committee of educators and bookmen under the chairmanship of Frank A. Jensen, superintendent of La Salle-Peru Township High School and Junior College, La Salle, Ill., has been adopted by the Illinois City Superintendents' Association.

In brief, the 17 articles of the code are as follows:

1. The responsibility and the authority for the selection of textbooks should rest with the educational administration of the school system.

2. It is not ethical to distribute textbook business among several competing publishers or to give consideration to personal likes and dislikes toward bookmen.

3. It is unethical for bookmen to contact members of the boards of education except upon request of the superintendent.

4. It is not honest for a superintendent or a member of a textbook selection committee to receive from a publisher a reward for services in the selection of textbooks.

5. It is unethical for bookmen or superintendents to circulate personal criticism or indulge in personalities in connection with textbook adoption.

6. It is not ethical for bookmen to influence the appointments of administrators or teachers to educational posts or to textbook committees for the purpose of obtaining their favor in the selection of textbooks; it also is unethical to influence the election of school board members.

7. It is unethical to interview teachers without consent of their superiors or to attempt to obtain secret information from textbook committee members.

8. It is unethical to use the influence of laymen in obtaining adoptions or to appeal to sectarian prejudices in meeting competition.

9. It is undignified for an author to use his professional position to obtain adoption of his textbook either through field work, professional addresses or classroom instruction.

10. While it may not be unethical to make use of secret committees in the selection of textbooks, it is charged that frequently the intent of the secrecy is to conceal an unethical selection.

11. The superintendent is justified in taking drastic measures if the conduct of the bookman falls below standards of transacting public business.

12. It is unethical to give some book-

men an opportunity to present the merits of their books and not give the same privilege to others. Similarly, it is unethical to give confidentially to some bookmen information that is withheld from others.

13. It is not ethical to favor local authors unless their textbooks are as good as competing textbooks.

14. It is not legal or ethical to reproduce any textbook material covered by copyright unless by permission of the copyright owner. This applies to books adopted as well as to books not adopted.

15. It is ethical for a bookman to bring to the attention of the superintendent unethical practices of a textbook committee.

16. It is unethical for a superintendent to request, or a bookman to offer, free desk copies, free textbooks for indigent pupils or any other concession beyond the price list with the state superintendent of public instruction.

17. It is unethical for a superintendent or members of a selecting committee to sell examination textbooks furnished by the publisher.

Members of the committee, other than Mr. Jensen, include the following: R. C. Verhines of the Illinois State Department of Public Instruction; W. R. Curtis, superintendent, Alton, Ill.; R. G. Brown of Houghton Mifflin Company, and W. S. Stanton, D. C. Heath and Company.

INSTRUCTION

Traveling Reading Clinic

Recently a traveling reading clinic visited five teacher training centers in the state of Mississippi during a two-week period. Six hundred teachers a day heard Dr. U. W. Leavell, professor of education at Peabody College, lecture on modern methods of teaching reading.

Clinics were held at State Teachers College, Hattiesburg; Delta State Teachers College, Cleveland; University of Mississippi; Mississippi State College for Women, and the Power School, Jackson.

Diagnostic work was done with children of low, normal and superior ability who for various reasons could not read. A number of interested mothers drove from 50 to 75 miles to bring handicapped children to the clinics.

The physical, mental, social and emotional backgrounds of these children were investigated by Doctor Leavell,

who also photographed their eye movements during the act of reading in conjunction with other tests. In addition, he demonstrated remedial work that could be done with these children.

In-Service Training

The Public Service Institute of Pennsylvania has been established in the department of public instruction for the purpose of organizing schools of in-service education on a statewide basis. The staff of the institute consists of a principal and a head teacher for each of the schools. Part-time vocational teachers selected from persons regularly employed in their respective vocations will serve as local, county or zone teachers, while a few technicians and experts will serve as traveling teachers.

Schools now in operation include those for municipal patrolmen, firemen, finance officers (assessors and tax collectors), street and highway supervisors and health officers, and for those in state service, such as factory inspectors, labor law administrators, and personnel in the unemployment compensation and employment service.

Public Housing Pedagogy

Just across the street from the Lincoln High School at Evansville, Ind., the federal government last summer opened Lincoln Gardens, a low-cost housing project that replaced one of Evansville's slum areas. Enrolled in the Lincoln High School are the pupils of the 191 low-income Negro families that are moving into the new housing center or are considering the possibility.

This situation afforded a natural teaching project through which the learning experiences of the Lincoln High School program might be integrated with the life of the community. Accordingly the high school has established public housing instruction as a part of conventional courses now being offered in the school, such as social studies, health and safety, mathematics, home economics, industrial arts, science, commercial subjects and English. In an experimental manner, the housing units for this school year are being treated in the classroom each Friday, the other work of the course affected being set aside on that day.

The school is negotiating with the Federal Housing Authority for the use of one of the apartments for home economics instruction.

From a complete set of blue prints of the project supplied the school early in the planning of the course, industrial arts classes have built a model of one of the apartment buildings. The model has served to further community and school interest in the low-cost housing project erected in that area.

Can They Practice What You Preach?



IN too many schools today, washing facilities are so inadequate—so generally uninviting—that there's little inducement for children to practice the hygienic habits preached to them in the classroom.

The logical way to stimulate a child's interest in keeping his hands clean is to make the task as pleasant as possible. And one of the most successful ways to accomplish this purpose is by installing Ivory Soap Dispensers.

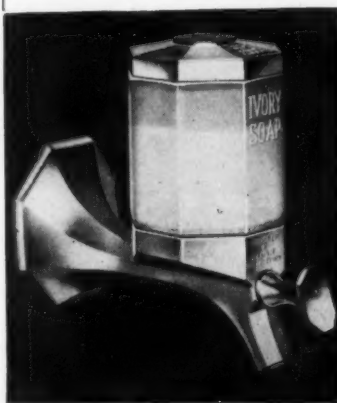
CHILDREN LIKE IVORY DISPENSER SERVICE

It's easy—it's pleasant—to wash face and hands with the Ivory Dispenser. The dispenser itself is exceptionally attractive with its gleaming chromium surfaces and its gracefully designed glass bowl which holds the flaked or granulated Ivory Soap.

And children go for Ivory Soap. They know that it is pure, gentle, rich lathering and rapid and thorough in its cleansing action.

Your students—and their parents—will be grateful to you for providing these better washing facilities. A trial order—enough Ivory Dispensers for one or two of your washrooms—will prove it.

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With each push of the plunger, the Ivory Dispenser delivers a measured amount of flaked or granulated Ivory Soap. Dispenser has no complicated parts to clog or get out of order. No parts to rust, tarnish or corrode. Easy to install—on either vertical or horizontal surfaces. Easy to refill. Tamper-proof. Low in first cost and in up-keep. Write for descriptive folder and price list.

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For classrooms, difficult to darken, many schools use the Da-Lite Da-Tex rear-projection silk screen. It is absolutely free from graininess and assures a uniform diffusion of light, so essential to bright, clear pictures. Sizes range from 15" x 20" to 36" x 48". The screen is mounted in a sturdy frame which fits on to a Da-Lite tripod.

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Convenient operation has characterized Da-Lite Screens for 29 years. Da-Lite portable screens are light in weight, easily carried, and can be quickly set up. The Challenger, consisting of screen, metal case and tripod, can be set up anywhere in 15 seconds. For large classrooms and auditoriums, Da-Lite's new electrically operated Electrol Screen combines the utmost convenience with maximum protection for the screen fabric.

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SCREENS

Meet Every Need

On the Air During January

The following programs of particular interest to school people are arranged by the Columbia Broadcasting System and the National Broadcasting Company. All programs are listed in Eastern Standard Time. Watch listings for your local outlets.

Daily

12:30-1:15 p.m.—National Farm and Home Hour (NBC Blue).¹

Sunday

10:30-11:00 a.m.—Music and American Youth, programs given by public school children from cities all over the country (NBC Red).

12:30-1:00 p.m.—University of Chicago Round Table (NBC Red).

1:00-2:00 p.m.—Great Plays, masterpieces of the drama (NBC Blue).
Jan. 8—She Stoops to Conquer.
Jan. 15—School for Scandal.
Jan. 22—Mary Stuart.
Jan. 29—Hernani.

2:00-2:30 p.m.—Americans All, Immigrants All, sponsored by the U. S. Office of Education. Dramatization of the contributions which the successive waves of immigrants have brought to the United States, written by Gilbert Seldes (CBS).

3:00-5:00 p.m.—New York Philharmonic Symphony Orchestra, John Barbirolli, conducting (CBS).

4:30-5:00 p.m.—The World Is Yours, dramatic series sponsored by the Smithsonian Institute (NBC Red).

6:00-7:00 p.m.—New Friends of Music concerts broadcast from Town Hall, New York, continuing until February 19 (NBC Blue).

7:00-7:30 p.m.—The Peoples' Platform, dinner guests of Prof. Lyman Bryson of Columbia University from all walks of life talk over current questions (CBS).

8:00-9:00 p.m.—This Is New York.

10:30-11:00 p.m.—Headlines and Bylines. Comments on world affairs by H. V. Kaltenborn, Ralph Edwards (CBS).

Monday

2:30-3:00 p.m.—American School of the Air, "Frontiers of Democracy" (CBS).

3:00-3:45 p.m.—Rochester Civic Orchestra (NBC Blue).

5:45-6:00 p.m.—"New Horizons," sponsored by the American Museum of Natural History (CBS).

6:00-6:15 p.m.—Science in the News (NBC Red).

7:45-8:00 p.m.—Science on the March (NBC Blue).

9:00-9:30 p.m.—Dorothy Thompson (NBC Red).

10:30-11:00 p.m.—National Radio Forum (NBC Blue).

Tuesday

12:45-1:15 p.m.—Music Makers, conducted by Dr. Joseph E. Maddy, Elementary, 12:45-1:00 p.m.; advanced, 1:00-1:15 p.m. (NBC Red).

1:30-1:45 p.m.—General Federation of Women's Clubs, consumers' program (NBC Red).

2:00-2:30 p.m.—Science Everywhere. Junior science, Elementary, 2:00-2:15 p.m.; advanced, 2:15-2:30 p.m. (NBC Blue).

2:30-3:00 p.m.—American School of the Air, "The Music of America" (CBS).

2:30-3:00 p.m.—NBC Music Guild (NBC Blue).

4:45-5:00 p.m.—Of Men and Books. Prof. John T. Frederick reviews books and interviews guest authors (CBS).

5:30-6:00 p.m.—Let's Pretend, a program of fairy stories for children (CBS).

7:45-8:00 p.m.—The Roving Prof. William Montgomery McGovern discusses little known sidelights of life around the globe (NBC Red).

Wednesday

2:00-2:30 p.m.—Your Health, sponsored by the American Medical Association (NBC Blue).²
Jan. 4—Fool's Gold.
Jan. 11—Only a Cold.
Jan. 18—Scarlet Fever, Measles and Whooping Cough.
Jan. 25—Smallpox and Diphtheria.
Feb. 1—Preventing Epidemics.

2:30-3:00 p.m.—American School of the Air, "The Lives Between the Lines" (CBS).

5:15-5:30 p.m.—So You Want to Be—Possible careers for high school pupils (CBS).

5:45-6:00 p.m.—Exploring Space, sponsored by the American Museum of Natural History (CBS).

6:00-6:15 p.m.—Our American Schools, dramatizations tracing growth and development of the nation's school system, Belmont Farley, narrator (NBC Red).

6:30-6:45 p.m.—Music Is My Hobby (NBC Red).

9:30-10:00 p.m.—Wings for the Martins. What modern education has to say on the problems of children and youth in "finding their wings." Sponsored by the U. S. Office of Education and the National Congress of Parents and Teachers (NBC Blue).

Thursday

2:30-3:00 p.m.—American School of the Air, "This Living World" (CBS).

5:30-6:00 p.m.—Let's Pretend, a program of fairy stories for children (CBS).

6:00-6:15 p.m.—Operalogue broadcasts of the Metropolitan Opera Guild, designed to aid radio audiences in enjoying opera broadcasts (NBC Red).

8:30-9:30 p.m.—Rochester Philharmonic Orchestra with Jose Iturbi as conductor will be heard December 1, January 12 and 19, February 9, March 2 and 16 (NBC Blue).

8:30-9:15 p.m.—Eastman School of Music Orchestra under the direction of Dr. Howard Hanson and Paul White will be heard on December 8 and 15, January 5 and 26, February 2, 16 and 23, March 9, 23 and 30, April 6, 20 and 27 (NBC Blue).

9:30-10:30 p.m.—America's Town Meeting of the Air, George V. Denny Jr., moderator (NBC Blue).

10:00-10:30 p.m.—Columbia Workshop, experiments in drama (CBS).

10:30-11:00 p.m.—Americans at Work, interviews with workers in representative jobs. CBS adult education series.

Friday

2:00-3:00 p.m.—Walter Damrosch Music Appreciation Hour (NBC Blue).

2:30-3:00 p.m.—American School of the Air, "New Horizons" (CBS).

7:15-7:30 p.m.—National Youth Administration (NBC Blue).

10:45-11:00 p.m.—American Viewpoints program (CBS).

Saturday

10:30-10:45 a.m.—The Child Grows Up (NBC Blue).

10:45-11:00 a.m.—Florence Hale's talks, directed to parents, explaining methods of classroom procedure so that education may continue at home as well as in school (NBC Red).

11:00-12:00 noon—Cincinnati Conservatory of Music. New York Philharmonic Children's Concert alternates on third Saturday of each month (CBS).

11:00-11:30 a.m.—No School Today, a new safety program for children (NBC Red).

11:30 a.m.-12:00 noon—Milestones in the History of Music, Eastman School of Music program (NBC Red).

12:00 noon-12:25 p.m.—American Education Forum. Conducted by Dr. Grayson Kefauver, professor of education, Stanford University (NBC Blue).

12:00-12:30 p.m.—NBC Music Guild (NBC Red).

1:15-5:00 p.m.—Metropolitan Opera (NBC Red).

7:45-8:00 p.m.—Lives of Great Men, Dr. Edward Howard Griggs (NBC Red).

8:30-9:00 p.m.—Original Plays (NBC Red).

10:00-11:30 p.m.—NBC Symphony Orchestra under direction of Arturo Toscanini (NBC Blue).

¹Except Sunday.

²Owing to program conflicts, there will be no Chicago broadcast of the network program. Instead, a recording of the program will be broadcast over Station WENR at 8 p.m. each Wednesday.

RADIO

Reception Facilities

There are 147 radios in Kentucky's public schools serving 45,934 children; 49 sets are in high schools and 80 are in elementary schools, while 18 are in combined schools.

The foregoing statistics were compiled by a University of Kentucky survey from the replies to a questionnaire sent out by the university's radio director to 275 district school superintendents. Ninety-one replies, besides reporting on the possession of a radio, gave information on the programs listened to and the programs needed but not available.

One school pointed out the need of a safety program; two asked for information on public schools; two for history; two for geography; one for art appreciation; two for debates at high school level; one for government and politics.

AWARDS

American Education Award

Dr. Payson Smith has been selected as the recipient of the American Education Award for 1939, made annually by the Associated Exhibitors of the N.E.A. to an educator who has contributed conspicuously to the progress of education in America during his lifetime. The award will be presented to Doctor Smith at the meeting of the A.A.S.A. in Cleveland on February 28.

Doctor Smith's name will be added to the bronze plaque which hangs in the N.E.A. headquarters in Washington, D. C., containing the names of those previously honored: James W. Crabtree, Susan M. Dorsey, Randall J. Condon, Philander P. Claxton, Albert E. Winship, Amos Alonzo Stagg, Walter J. Damrosh, Jane Addams, Lorado Taft, William McAndrew and Charles Hubbard Judd.

Doctor Smith is a native of Maine where he was a secondary school administrator and state superintendent. Later he became commissioner of education for Massachusetts.

RESEARCH

N. C. Education Recommendations

Important recommendations of the education commission authorized by the 1937 North Carolina legislature to study the schools of that state were the following: (1) an extension of the eleven year state-supported public school program to a twelfth year with partial state support; (2) an increase

in teachers' salaries, particularly in the longer experienced brackets in the present salary schedule; (3) recodification of the school laws of the state; (4) increase in the compulsory attendance law from age 14 to 16, and (5) readjustment and rearrangement in the present state boards governing education in the state.

Professional Degrees

Twenty-two of Pennsylvania's 246 district and county superintendents and four of its 87 assistant superintendents

hold the Ph.D. degree, a recent study has revealed. Two of the 66 county superintendents, or 3 per cent, serving at the present time, hold the doctor's degree. Four of the 81 assistant county superintendents, or 5 per cent, also hold the doctor's degree.

Pennsylvania Survey

The committee on school surveys of the University of Pennsylvania School of Education has been engaged by the board of education, Wyomissing, Pa., to survey local district schools.

NEW WASHFOUNTAINS FOR SCHOOLS



New "EF" foot-controlled Bradley Washfountain in Enameled Iron.

Included in the 1939 line of Bradley Washfountains are two new semi-circular fixtures designed especially for modern school washrooms—from kindergartens to colleges...

Extremely handsome in appearance, the fountains are available in enameled iron and stainless steel. They may be had in hand or foot-controlled types and in three or six person capacities.

Like other Bradley Washfountains, the new fixtures assure the ultimate in sanitation because each user washes in running water. They save space, time and water, facilitate washroom supervision, are simple to operate, practically self-cleaning, and extremely durable.

Write for literature fully describing these new fountains and other Bradley products. **BRADLEY WASHFOUNTAIN CO.,**
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A full circular type Bradley Washfountain in a Pennsylvania boys' school.



Plans and ideas for washrooms will be furnished by Bradley Washroom Consultants. Our free Catalog mailed also on request.

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The "Academy" is lower in price and easier to operate because it has only those controls which are essential in school service. In classroom or moderate-sized auditorium it projects theater-quality movies, both sound and silent. Has "blimp" case for quiet operation, speaker-hiss eliminator, "floating film" protection, 750-watt lamp, and three-quarter-hour film capacity. Complete in two light cases, only \$298. Terms available. Write for details and for information on other new, low-priced Filmosound and Filmo silent projectors.

FREE List of 1000 Sound Films

Send the coupon now for this latest listing of more than a thousand 16 mm. sound films edited especially for education and entertainment of school children. You can save time and trouble by centralizing your film rentals and purchases from one complete library—the Filmosound Library. Bell & Howell Company, Chicago, New York, Hollywood, London. Established 1907.



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VISUAL EDUCATION

San Salvador Promotes Films

The *New York Times* reports that the ministry of education of San Salvador has appointed a board of educational motion pictures, which will maintain relations with the International Institute of Educational Motion Pictures, with headquarters in Rome. The decree instructs the board to promote movies as an instructive diversion for pupils.

A Midwest Forum

More than 450 school administrators of the Chicago metropolitan area were dinner guests of the Bell & Howell Company at a visual education forum in Chicago on December 8.

An outcome of this meeting is expected to be a Midwest Visual Education Forum to be organized in the near future. Although the group is being sponsored by the Bell & Howell Company, this firm will have no part in the organization after its establishment.

One feature of the forum was the premier showing of a new sound film, "How Motion Pictures Move and Talk," that depicts the mechanics of a projector, camera, sound and fundamental principles behind production.

Dr. Harvey B. Lemon, professor of physics, University of Chicago, was the guest speaker on the program. A panel of distinguished visual educators on the program included the following: Paul G. Edwards, director, science and visual instruction, Chicago board of

education; Mrs. R. M. McClure, president, Better Films Council of Chicago-land; E. C. Waggoner, director, science and visual instruction, Elgin High School, Elgin, Ill.; J. E. Hanson, chief, bureau of visual instruction, extension division, University of Wisconsin; Donald Bean, University of Chicago Press, and P. W. Fitzwater, Lake View High School, Chicago.

Films in Review

THE MICHIGAN BEAVER: 16 mm. silent 15 min.). Free. Michigan Department of Conservation, Educational Division, Lansing.

Habits and habitats, life and daily work of the beaver are admirably portrayed. Excellent quality of the photography enables the children to observe at first hand the rebuilding of a damaged beaver dam, the cutting of saplings and the animal's floating of logs down a series of canals which have been constructed for the purpose.

Straight-forward factual dialogue adds not a little to its value. Vocabulary is well chosen and the dialogue is concise with time between comments to concentrate on the picture itself.

From the point of view of elementary science, the dialogue is especially gratifying. There is no attempt made to personify and humanize the beaver. In fact, definite effort is made to correct erroneous impressions that children have gained from other sources. An outstanding educational motion picture.—BEATRICE HURLEY, *Horace Mann School, New York City.*

Films for the School Screen

American History—5. Civil War Period

Heart of Lincoln—His life; early struggles and hardships; his power of self-sacrifice; responsibilities and courage during the Civil War. 5 reels. 16 and 35 mm., silent. For rent or for purchase. Wholesome Films Service, Inc., 28 Melrose Street, Boston, for 16 mm. Ideal Pictures Corporation, 28 East Eighth Street, Chicago, for 35 mm.

Dixie—Chronicles of America series. The story of the civilian South throughout the Civil War, revealing the part played by the women of the Confederacy and the position and attitude of the slaves. Appomattox: General Lee meets with General Grant and terms of surrender are arranged. 3 reels. 16 and 35 mm., silent. For rent or for purchase. Yale University Press Film Service, 386 Fourth Avenue, New York.

Abraham Lincoln—Condensed version of the Drinkwater play. 2 reels. 35 mm., silent. For rent. F. C. Pictures Corporation, 505 Pearl Street, Buffalo, N. Y.

Rise of Steam Power and Civil War—From the series, "Three Centuries of Massachusetts," prepared under the direction of Prof. Albert Bushnell Hart. 1 reel. 16 mm., sound. For rent. Bell & Howell Company, Films Division, 1839 Larchmont Avenue, Chicago.

Abraham Lincoln—Two reels that depict the life and times of Lincoln. Reel 1 deals with his life up until his election to the presidency. Reel 2 shows Lincoln as a statesman. 16 and 35 mm., silent. For rent or for purchase. Eastman Kodak Company, Teaching Films Division, Rochester, N. Y.

MEETINGS

Schools v. Job Agencies

Whose function it is to find jobs for youth was a point that brought wide divergencies of opinion from vocational authorities and educators attending the meeting of the American Vocational Association in St. Louis last month.

Many educators insisted placement should be developed as a function of the public schools. Others objected on the grounds that it could be accomplished better by outside agencies.

George E. Hutcherson, supervisor of guidance, New York State Department of Education, asserted that the schools have a knowledge of the pupil's ability and training and could place him as readily as an employment agency if school taxes were sufficient.

John H. Seidel, state director of vocational education, Baltimore, said employment agencies ignore youth in favor of the experienced applicant. For that reason he advocated special provision for the placement of youth and expressed the belief it was part of the school's job.

Walter V. Bingham, executive director of the Personnel Research Federation of New York City, would make it the school's responsibility to shorten the lag between graduation and the first job.

Dr. Mary H. S. Hayes, director of guidance and placement for the N.Y.A., said that she believed other organizations could handle job placement better than schools, because the task of occupational adjustment of youth cannot be carried on without considerable regard for the preferences of the youth. Without conscription, youth will continue to exercise considerable independence regardless of the plan of organized society, she pointed out. "There gets to be a saturation point, when a boy or girl refuses to go to school any longer, and when a youth reaches it he prefers some place else to school."

More than 4000 of the association's 18,000 members attended the convention. There was considerable discussion of the Harrison-Thomas-Fletcher Bill and the consensus seemed to be that the organization should support it provided it could be assured that vocational education will be continued and that the accepted standards for trade training will not be lowered.

Some comment was caused by the appointment of specialists in vocational guidance in the U. S. Office of Education and in state departments of public instruction. Some regarded the step with alarm in view of the fact that these individuals are to be paid out of Smith-Hughes or George-Deen funds.

It was felt that there are so many activities going on under the name of vocational guidance that there is a danger of the funds being directed into channels that have no vocational significance. It was generally decided to await developments.

School Board Members Organize

Twenty-eight states were represented in the organization meeting of the National Association of School Board Members that met in Chicago Decem-

ber 5 and 6. Paul J. Wortman, Dayton, Ohio, was elected president of the newly formed group. Lynn Thompson, president, Minneapolis board of education, was named secretary-treasurer.

College Teachers to Meet

The National Society of College Teachers of Education will meet in Cleveland February 25 to March 1. It will hold joint meetings with several allied groups, including the American Association of Teachers Colleges and



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Supervisors of Student Teaching, the National Society for the Study of Education and the American Educational Research Association.

LEGISLATION

Tenure Threatened

Job security that Pennsylvania teachers have obtained through tenure legislation is threatened by the State School Directors Association, which is planning to sponsor drastic amendments to the law.

Contemplated changes include insubordination as a possible cause of dismissal; definition of incompetency; a three year probation period before tenure becomes applicable; dismissal of married women teachers at the discretion of school districts; no tenure protection beyond the age of 62 years, and elimination of the right of recourse to the courts.

61,000 Imaginary Pupils

When the Illinois general assembly convenes this month, bills will be placed before it that will aid in consolidating many of the 9925 one room rural schools in the state. One bill would offer state funds in payment of 75

per cent of the cost of transporting children from abandoned one room schools to consolidated schools. Maximum annual payment for one pupil would be \$15. This would cost \$400,000 the first year, it is estimated.

Another bill would revise the method of distributing state aid to one room schools. Schools would receive the present amount of \$11 per pupil annually only for the actual number of pupils in attendance. At present the smaller schools are paid for 18 pupils, \$198, whether they have one or 18, and this makes local school boards reluctant to consider consolidation. Actually the state is paying for 61,000 imaginary pupils.

PUBLICATIONS

Pictorial Progress

The 1937 annual report of the superintendent of the Detroit public schools was in the main pictorial, resembling *Life* magazine in its layout and format. This year the Detroit report is a tabloid rotogravure magazine of 16 pages. The Detroit Teachers Association has contributed to the publication of this report in order that it may reach every home in the city of Detroit.

For Improvement of Instruction

The Florida Department of Public Instruction has recently published Bulletin No. 1 of a Florida Program for the Improvement of Instruction, which deals with valuable aids for teachers in grades 7 to 12. It contains an introductory section explaining the point of view from which these materials were developed and suggestions for their classroom use.

TRANSPORTATION

The Answer Is "No"

"May a school bus driver employed by or under contract with a school board furnish school transportation to nonresident pupils at rates less than the pro rata cost?" When the state auditor of Iowa asked this question of the attorney general of that state, the attorney general's answer was "no."

Winter Tragedy

Early one snowy morning in December a school bus loaded with more than 40 pupils, ranging in ages from 12 to 18 years, on its way to the Jordan District High School at Midvale, a suburb of Salt Lake City, stopped near a rail-



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road crossing in accordance with Utah law and then drove ahead. The bus was directly on the tracks when it was struck by a fast freight train that had not been visible to the bus driver in the snowstorm.

Because the bodies of the children were so mutilated, at an improvised morgue in the Salt Lake City General Hospital, only 22 pupils' bodies and that of the driver were able to be identified immediately. Seventeen of the survivors were injured, six critically.

NAMES IN NEWS

Superintendents

SUPT. FRANK CODY of Detroit was honored at an informal dinner given by the administrative division of the Detroit Teachers Association celebrating his completion of twenty years as superintendent of schools in Detroit. Mr. Cody began his twenty-first year as superintendent and his twenty-sixth year as a member of the state board of education at the beginning of this school year.

B. R. WALKER, who served for ten years as vice principal and principal of the high school at Fayetteville, Ark., is now superintendent of schools at Portland, Ark.

HOMER W. ANDERSON, superintendent of schools, Omaha, Neb., is a likely choice for the post of superintendent of

schools at San Antonio, Tex., the *San Antonio Express* reports. SUPT. J. CHESTER COCHRAN, who resigned in July subject to appointment of a new superintendent, will serve as an assistant superintendent.

GEORGE H. ILSE has succeeded the late FRANK L. MILLER as superintendent of schools at Lyons, N. Y. He formerly was principal of Westmoreland Central School, Westmoreland, N. Y.

MRS. MAUD SMITH RUNDALL and HUGH N. GARWOOD, superintendents, respectively, in the first and third supervisory districts of Dutchess County,

New York, on August 1 will become superintendents in the Hyde Park and Wappingers Falls Central school districts of that county.

P. R. AUWARTER is the new superintendent of schools at Virginia, Ill., succeeding M. M. CRUFT, who recently was elected county superintendent of schools in Cass County, Illinois.

ALFRED J. MARYOTT, principal of the senior high school at Pawtucket, R. I., has become the assistant superintendent of schools at East Providence.

A. J. NEBLESECK, principal of the high school at Auburn, Neb., has been ap-



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Coming Meetings

- Jan. 12-13—Public School Officers Association, Nashville, Tenn.
- Feb. 22-25—American Council of Guidance and Personnel Associations, Cleveland.
- Feb. 22-25—National Vocational Guidance Association, Cleveland.
- Feb. 25-26—School Public Relations Association, Hollenden Hotel, Cleveland.
- Feb. 25-March 1—National Society of College Teachers of Education, Cleveland.
- Feb. 25-March 2—American Association of School Administrators, Cleveland.
- March 2-4—American Association of Junior Colleges, Grand Rapids, Mich.
- March 22-24—South Carolina Education Association, Columbia.
- March 22-24—Mississippi Education Association, Jackson.
- March 23-25—Alabama Education Association, Montgomery.
- March 23-25—Georgia Education Association, Atlanta.
- April 3-6—American Association for Health, Physical Education and Recreation (N.E.A.) San Francisco.
- April 6-8—Tennessee Education Association, Nashville.
- April 8—California Teachers Association, Palace Hotel, San Francisco.
- April 10-14—Association for Childhood Education, Atlanta, Ga.
- April 12-15—Kentucky Education Association, Louisville.
- April 15—Massachusetts Teachers Federation, Boston.
- July 2-6—National Education Association, San Francisco.
- Oct. 16-20—National Association of Public School Business Officials, Cincinnati.

pointed superintendent to succeed J. A. JIMERSON, appointed dean of men at Nebraska State Teachers College, Peru.

WILLARD B. SPALDING became assistant superintendent of schools at Belmont, Mass., on January 1. He formerly was superintendent of the school district that includes Hanover, Hanson and Norwell, Mass.

Principals

B. B. HERR, new president of the southern district of the Pennsylvania Education Association, is principal of the new \$1,500,000 coeducational high school at Lancaster, Pa.

OTIS J. BARNHILL, formerly a faculty member of Buchtel High School, Akron, Ohio, has been appointed principal of Hower Vocational High School, Akron.

REX CARDEN, for three years principal of the high school at Wahoo, Neb., was appointed principal of the high school at Auburn, Neb., recently.

DR. FREDERICK W. OSWALD JR., principal of Eastern District High School, Brooklyn, N. Y., has been recommended by the board of superintendents for the principalship of the new Lafayette High School, nearing completion at Bensonhurst, N. Y.

HARRY G. DAVIS, a substitute teacher in the schools at South Bend, Ind., has

been appointed principal of the high school at Lagro, Ind.

ELMER A. KEISER has been elected supervising principal of Porter Township High School at Tower City, Pa. He succeeds Dr. O. C. KUNTZLEMAN, who resigned to become a member of the faculty at Keystone State Teachers College, Kutztown, Pa.

A. HENRY OTTOSON, principal of the Memorial Junior High School of Framingham, Mass., has been appointed to head Junior High School West at Arlington, Mass., to succeed Dr. FRANKLIN P. HAWKES, who was appointed superintendent at Abington, Mass.

CHARLES A. FRY is the new principal of Franklin High School, Portland, Ore.

HENRY J. FITZPATRICK has been appointed principal of Holyoke High School, Holyoke, Mass., to succeed Dr. HOWARD CONANT, who has directed the school since 1906. Doctor Conant's resignation becomes effective at the end of the school year.

EDWARD F. FOLLEY, acting vice principal of Central High School, Paterson, N. J., has been appointed permanently to the post.

SUPT. WILLIAM H. JOHNSON of Chicago recently recommended the appointment of 16 new elementary school principals who were appointed recently by the Chicago board of educa-

tion: MARY HELEN BRINDL, Avondale School; AMERIGO ROBERT SANSONE, Sumner School; LUCY F. RIGHEIMER, Mayfair School; MATHEW L. FITZGERALD, Shoop School; ANNA DORIS LANZ, Schiller School; WILLIAM J. COONEY, Skinner School; FRANCES A. MCCARTHEY, Otis School; MARGARET GERTRUDE MCCARTHY, Oakland School; GRACE AGNES MULQUEEN, Jefferson School; ISABELLE E. FITZSIMMONS, Harte and Revere schools; MICHAEL R. FORTINO, Kershaw School; LILLIAN PETERSON, Crerar and Chalmers schools; CATHERINE JOSEPHINE RYAN, Palmondon and Haven schools; GLADYS ESTELLE SAMPSON, Emerson and Peabody schools; GERTRUDE CATHERINE SHEA, Headley and Thomas schools, and HENRY J. WOESSNER, Tennyson School.

State Departments

JESSIE M. PARKER succeeded AGNES SAMUELSON as state superintendent of public instruction in Iowa on January 1. Miss Samuelson held the office for twelve years.

DR. WALTER F. DEXTER, California superintendent of public instruction, has been placed in charge of educational exhibits at the Golden Gate International Exposition. Dr. IRA W. KIBBY, chief of the bureau of business education, will have the title of director



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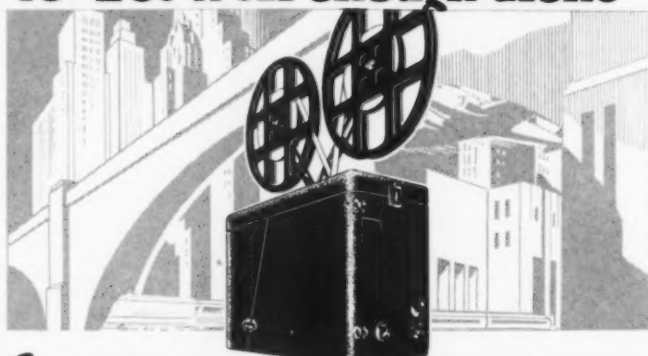
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of educational exhibits. His assistant will be Mrs. VESTA MUEHLEISEN.

DR. DON M. WOLFE of Beaver Falls, Pa., has been appointed chief of the division of registrations and renewals in the Pennsylvania department of public instruction. He succeeds Dr. W. RAY SMITH, who has become dean of instruction at the Indiana State Teachers College, Indiana, Pa.

Resignations and Retirements

DR. RANDOLPH T. CONGDON will retire February 1 as principal of Potsdam State Normal School, Potsdam, N. Y.

WILFRED H. PRICE, for more than thirty years superintendent of schools at Watertown, Mass., has resigned because of ill health. FRANCIS A. KELLY was appointed to the vacancy.

CHARLES BAXTER CRITCHFIELD, principal of Knoxville Junior High School, Pittsburgh, Pa., has announced that after fifty years of teaching he will retire in June.

E. R. DEERING has resigned as superintendent of Dunsmuir Elementary School, Dunsmuir, Calif., to become supervisor of rural schools in Siskiyou County, California.

Miscellaneous

ORREN H. LULL has been appointed to the post of deputy executive director,

National Youth Administration, recently vacated by RICHARD R. BROWN.

DR. WILLARD E. GIVENS recently was reelected executive chief of the headquarters staff of the N.E.A. for a four year term.

DR. RAY L. HAMON, school building specialist on the staff of Peabody College for Teachers, has been recommended by the Nashville board of education as a consultant on the new \$2,800,000 school building program in that city.

In the Colleges

CHANCELLOR E. H. LINDLEY of the University of Kansas has asked the board of regents to relieve him of administrative duties at the end of this academic year. The chancellor, who will reach the retirement age of 70 early in the next academic year, expressed a desire to return to teaching, saying he would cherish greatly the opportunity to teach a "course in living" to undergraduates.

HERMAN B WELLS was inaugurated as the eleventh president of Indiana University on December 1, becoming at the age of 37 the youngest state university president in the country.

WALTER R. MCCORNACK, Cleveland architect, will become dean of the Massachusetts Institute of Technology

school of architecture when WILLIAM EMERSON retires next autumn. Mr. McCornack, a designer of school and college buildings, was appointed in 1936 by the board of education, New York City, to study school building problems.

DR. RALPH NOYER, dean of Ball State Teachers College, Muncie, Ind., returned in late December from a seven months' European tour where he studied modern education.

DR. MOWAT G. FRAZER, lecturer in education at the University of Michigan, has been appointed dean of Winthrop College at Rock Hill, S. C. He will assume his new duties this month.

DR. UMPHREY LEE, dean of the school of religion at Vanderbilt University, has accepted the presidency of Southern Methodist University.

DOUGLAS E. SCATES, director of research for the Cincinnati public schools, is teaching the required graduate courses in statistical methods at Teachers College, University of Cincinnati, during the 1938-39 session.

DR. RALPH F. STREBEL, associate professor of education, Syracuse University, was elected president of the National Institutional Teacher Placement Association when it met in Chicago recently. He will direct the association's annual survey of teacher placement results.

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THE BOOKSHELF

EDUCATION FOR AMERICAN LIFE. *A New Program for the State of New York. The Regents' Inquiry, Luther T. Gulick, Director.* New York: McGraw-Hill Book Company, 1938. Pp. xvii + 167. \$2.

Summary volume of the most significant state survey of public education yet made. Presents in concise, clear-cut style current weaknesses and recommendations for improvement.

THE TRAINING OF PRISON GUARDS IN THE STATE OF NEW YORK. By Walter M. Wallack. New York: Bureau of Publications, Teachers College, Columbia University, 1938. Pp. xix + 417. \$2.75.

Description and evaluation of the methods by which New York State is attempting to improve the caliber and competency of prison personnel.

TEACHABLE MOVEMENTS. *A New Approach to Health.* By Jay B. Nash. New York: A. S. Barnes and Company, 1938. Pp. x + 243. \$1.50.

Sensible and much needed debunking of magic, superstitions and sheer nonsense that have progressively crept

into so-called school hygiene courses. Highly recommended for professional improvement, as well as for entertainment.

THE STRUGGLE FOR A STATE SYSTEM OF PUBLIC SCHOOLS IN TENNESSEE, 1903-1936. By Andrew David Holt. *Contributions to Education, No. 753.* New York: Bureau of Publications, Teachers College, Columbia University, 1938. Pp. xvi + 502. \$3.85.

Well-written story of Tennessee's twentieth century struggle to establish, maintain and improve a state system of public schools, describing problems and methods encountered and progress made.

WEALTH, CHILDREN AND EDUCATION. By John K. Norton and Margaret Alltucker Norton. *Second Edition. The Strayer-Engelhardt School Administration Series.* New York: Bureau of Publications, Teachers College, Columbia University, 1938. Pp. xviii + 138. \$2.

Significant study of financial inequality between states with respect to education brought up to date. Suggests

program of federal aid. Deserves thoughtful reading.

BOOKS AND BABIES. By Garry Cleveland Myers and Clarence Wesley Sumner. Chicago: A. C. McClurg & Company, 1938. Pp. 116. \$1.75.

Help for parents in choosing adequate reading for small children. Valuable for adult study groups.

THE HAPPY AUTOCRAT. *A Life of Oliver Wendell Holmes.* By Hildergarde Hawthorne. Illustrations by William Merritt Berger. New York: Longmans, Green and Co., 1938. Pp. 213. \$2.

Biography of Oliver Wendell Holmes adjusted to the youthful reader.

THE GREAT ROAD. By Frederic Arnold Kummer. Illustrations by John R. Flanagan. Philadelphia: The John C. Winston Company, 1938. Pp. xi + 305. \$2.50.

Stories of the Great Road that stretched from Cairo to Basra over which the Babylonian, Assyrian, Egyptian, Macedonian, Greek and Persian passed to seek adventure, to carry trade and to conquer. Deserves a place in secondary school libraries.

SOUTHERN PLAINSMEN. By Carl Coke Rister. Norman: University of Oklahoma Press, 1938. Pp. xviii + 289. \$3.

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southern plains. A vivid picture of the early plainmen, the frontier doctor and the early schoolmaster. A contribution to the literature of Americana.

FIGHTING MUSKETS. By Edith Bishop Sherman. Illustrations by Henry C. Pitz. New York: Longmans, Green and Co., 1938. Pp. vii+324. \$2.

Some of the incidents in the struggle for liberty in New Jersey during the war for independence are interestingly told for secondary school readers.

STANDARDS FOR COLLEGE BUILDINGS. By E. S. Evenden, G. D. Strayer and N. L. Engelhardt. New York: Bureau of Publications, Teachers College, Columbia University, 1938. Pp. x+226. \$2.25.

To furnish orientation and descriptive background for the use of a standardized score card, a college school plant measuring instrument, by the same authors.

Just Off the Press

LE FRANCAIS EXPLIQUE. By Albert L. Cru. New York: Silver Burdett Company, 1938. Pp. xii+220. \$1.16.

INTERPRETING THE SCHOOLS OF NICHOLAS COUNTY TO THE PUBLIC. By L. O. Bobbitt. Summerville, W. Va.: Nicholas County Board of Education, 1938. Pp. 80. *Gratis* (Paper Cover).

FAR EASTERN FUNDAMENTALS. Edited by David Warren Ryder. *Far Eastern Affairs Pamphlets*, Vol. 1, No. 7. San Francisco: The Editor, 447 Sutter St., September 1938. Pp. 36. \$0.10, Single Copies; \$1 for 12 Issues, (Paper Cover).

STUDENT'S NOTEBOOKS, Series A, B, C and D. Prepared by Charles H. Farnsworth and Lawrence Abbott for Use in N.B.C. Music Appreciation Hour, Eleventh Season: 1938-39. Conducted by Walter Damrosch. New York: National Broadcasting Company, Inc., 1938. Pp. 32, Each Notebook. \$0.10 Each (Paper Covers).

RETAILING. Principles and Practices of Retail Buying, Advertising, Selling and Management. By G. Henry Richert. New York: The Gregg Publishing Company, 1938. Pp. xv+432. \$2.

ORNAMENTAL TYPEWRITING. By George A. Flanagan. Illustrated. New York: The Gregg Publishing Company, 1938. Pp. viii+113. \$1 (Paper Cover).

PROBLEMS IN ECONOMIC GEOGRAPHY. By Douglas C. Ridgley and Sidney E. Ekblaw. Illustrations by George R. Means. New York: The Gregg Publishing Company, 1938. Pp. xiii+203. \$1 (Paper Cover).

HIGHWAYS AND BYWAYS OF PENNSYLVANIA. By Linnie B. James. Philadelphia: The Circle Book Co., 1938. Pp. 63. \$0.24 (Paper Cover).

CHILDREN'S LITERATURE BY GRADES AND TYPES. By Ollie Depew. Boston: Ginn and Company, 1938. Pp. xiii+706. \$3.25.

THE RELATIVE MERITS OF THREE METHODS OF SUBTRACTION. An Experimental Comparison of the Decomposition Method of Subtraction With the Equal Additions Method and the Austrian Method. By John Theodore Johnson. Contributions to Education, No. 738. New York: Bureau of Publications, Teachers College, Columbia University, 1938. Pp. 76. \$1.60.

THE LIBRARY AND THE RADIO. By Faith Holmes Hyers. Chicago: The University of Chicago Press, 1938. Pp. xi+100. \$0.75 (Paper Cover).

STUDY AND APPRECIATION OF THE SHORT STORY. By Roy Ivan Johnson, Esther Marshall Cowan and Mary Safford Peacock. New York: Silver Burdett Company, 1938. Pp. 398+lxviii. \$1.40.

SUBJECT INDEX TO HIGH SCHOOL FICTION. By Jeanne Van Nostrand. Preliminary Edition. Chicago: American Library Association, 1938. Pp. 67. \$0.75 (Paper Cover).

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You will be amazed how easily you can erase the chalk marks and at the same time also pick up the chalk dust from the board when you use a Speedo Chamois Eraser. All of this can be done with a few of the easiest strokes imaginable.

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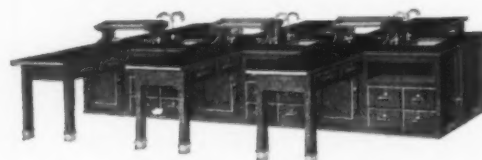
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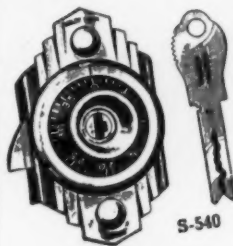
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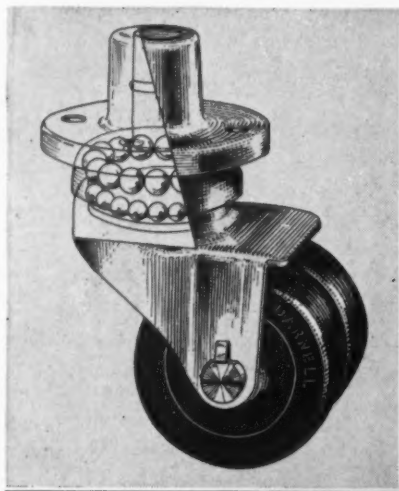
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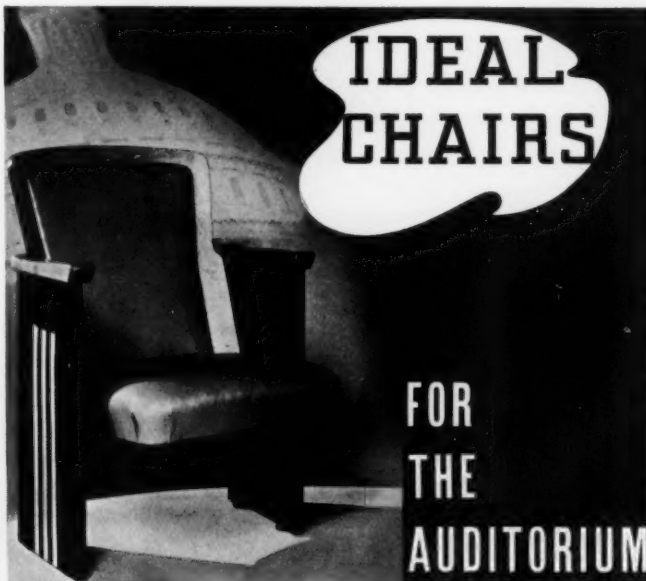
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• Cleanliness and durable construction are combined in the new toilet seat recently announced by the G. H. TENNANT COMPANY, 1821 Marsh Street, N.E., Minneapolis. . . . The new Royal typewriter (ROYAL TYPEWRITER COMPANY, INC., 2 Park Avenue, New York) features a device that sets the margin stops automatically at any desired position. . . . THE BRADLEY WASHFOUNTAIN COMPANY, Milwaukee, has brought out a new group washing unit designed

especially for the small school room. . . . A new bulletin on heating pumps and accessories, arranged according to pump types and capacities, has been published by C. A. DUNHAM COMPANY, 450 East Ohio Street, Chicago.

• Arthur M. Spore has been elected to the presidency of the AMERICAN CRAYON COMPANY, Sandusky, Ohio, to succeed the late George E. Parmenter.

Bibliography on School Plumbing

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The following companies have information that will be helpful in wash-room modernization: A.P.W. Paper Co., Albany, N. Y.; Bradley Washfountain Co., 2203 West Michigan Street, Milwaukee; C. F. Church Manufacturing Co., Holyoke, Mass.; Colgate-Palmolive-Peet Company, 105 Hudson Street, Jersey City, N. J.; Crane Co., 836 South Michigan Avenue, Chicago; The J. B. Ford Company, Wyandotte, Mich.; Hillyard Chemical Company, St. Joseph, Mo.; Huntington Laboratories, Inc., Huntington, Ind.; the Mills Company, Wayside Road at Nickel Plate R.R., Cleveland; the National Terrazzo and Mosaic Association, 1406 G Street, N.W., Washington, D. C.; Portland Cement Association, 33 West Grand Avenue, Chicago; Procter & Gamble, Cincinnati, Ohio; G. H. Tennant Company, 1821 Marshall Street, N.E., Minneapolis; Henry Weis Manufacturing Company, Inc., Elkhart, Ind.; West Disinfecting Company, 42-16 Barn Street, Long Island City, N. Y.; Chicago Hardware Foundry Company, North Chicago, Ill.

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THIS year it's Cleveland. The A.A.S.A. tent opens February 25; the sideshows, earlier or simultaneously. Before the entire show is ended, March will have come in, like a lamb or lion. Having no pronounced gift of prophecy, The NATION's SCHOOLS must wait until the March number to state whether the annual attack on school administrative problems was just baa-baa or more of a real roar. Convention sessions are so strenuous, however, that by the time the last dog is hung [hanged], convention lions and lambs are likely to lie down together in mutual exhaustion.

THE convention number next month will conform to our former pattern, with 12 or 15 of the top convention addresses presented in author-concentrate form. The Yearbooks will be summarized by the chairmen and the wealth of oratory and debate will be presented in straight news style.

A special insert on tinted stock, such as this month's Decorating and Painting Portfolio, will bring to readers the news of the convention promptly reported and broadly interpreted.

THESE Portfolios of the Month are generating such general good will that they will be continued throughout the entire year. April will bring a Commencement Portfolio. Those who have any community-shaking commencement experiences should send them in promptly for the benefit of other schoolmen who, as the graduation season advances, are wont to wear a fretted look.

FOR convention relief there will be the usual architectural, cafeteria and plant maintenance mate-

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rial with one or two articles on general school administration.

"Rural Education During the Depression" is the title of one of the non-convention contributions. Even it has its tie-up with the Cleveland meeting for Supt. Hobart M. Corning of Colorado Springs will present on the same table of contents a summary of the 1939 A.A.S.A. Yearbook entitled "The Problems of Youth in Villages and Rural Areas."

The depression story will be told by Julian E. Butterworth, director of the Graduate School of Education, Cornell University.

WHO says schools are not becoming color conscious? In his forthcoming description of the new high school at Wellesley, Mass., Supt. Edwin H. Miner illustrates precisely the same points on interior decoration that are included in the Decorating and Painting Portfolio in this issue. Here are some of his color schemes: corridors, warm red and brown; auditorium, reds, gold, buffs, aluminum and slate; cafeteria, gay blues and salmon with even blue tops on the cafeteria tables; classrooms, shades of green; music room, library and offices, soft shades of eucalyptus green. Incidentally, the unit cost of the building itself was 45 cents per cubic foot.

EXPANDING the school bus transportation service from a small consolidated school district of 50 square miles to an area 20 times that size presents all kinds of problems. Many of these were overcome in Aitkin, Minn., by a regular program of school advertising. In March, Supt. L. C. Murray outlines the program, which, believe it or not, has resulted in twelve buses that help transport the 415 nonresident pupils in the system.

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What Size School System? 57

Values of local school control and of regional, state or national authority are weighed by NORMAN FROST, professor of rural education, George Peabody College for Teachers, Nashville, Tenn.

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Color in Functional School Design 35

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Beauty Within 39

Some art principles that are basic to interior decoration and numerous devices for bringing color into the classroom are discussed by JANE REHNSTRAND.

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Draperies may be a source of color, may add charm to the schoolroom and may even serve a real function in teaching. IRA H. DAVEY, associate of Tooker and Marsh, architects, suggests materials, color combinations and ways of hanging draperies effectively.

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Washable and sunfast wallpapers have provided another item that may be effectively employed in decorating school interiors. LOUISE MCKOWN, a New York decorator, tells of appropriate uses of wallpaper.

Cleaning Painted Surfaces 45

Quality paints spell economy because they may be washed many times before they need repainting. However, quality washing is another thing. The proper procedure is explained by K. P. GRABARKIEWICZ.

The School Cafeteria

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MARY DEGARMO BRYAN, the department editor, presents the second in a series of five cafeteria layouts. The plans presented this month are for consolidated schools at Fort Ann and South Kortright, N. Y.

Health Program Centers on Food 68

Guidance in food selection for the 4500 to 6000 children who eat daily in the school cafeterias at Greensboro, N. C., begins in the classroom, according to ELOYSE SARGENT MILNER, director of school cafeterias.

LOOKING FORWARD

The Hygienist Speaks

A FEATURE of the Regents' Inquiry in New York State into the School Health Program (McGraw-Hill) is the emphasis placed by C.-E.A. Winslow, hygienist, on the true relation of the physical plant to the facilitation of the instructional process. He not only stresses the need for sound school hygiene as expressed through the physical structure but also emphasizes the value of total environment, concluding (page 102) with one of the major recommendations of need as:

"A healthful physical environment, including desirable temperature conditions in the classroom, adequate illumination, seats adjusted to postural needs of individual pupils, safe drinking water, sanitary toilets, washing facilities, cleanliness, safety and fire protection. Furthermore, the physical surroundings should be sufficiently attractive from an esthetic standpoint to promote a sense of self-respect and satisfaction on the part of pupil and teacher."

Tell the Truth

SHORTLY after the publication of "Education for American Life," Luther H. Gulick's summary volume of the Regents' Inquiry, the Associated Press for some reason that certainly requires an explanation released a news story that appeared in daily newspapers all over the United States. Local headline writers were apparently confused by the vagueness of the story and in many cities it appeared to the readers as if the report was of a survey of the United States as a whole instead of merely New York. Other news stories consistently "played up" the critical findings of the report more heavily than the constructive program recommended by the surveyors.

Repercussions of these stories caused considerable annoyance to many state departments of education and to many city school systems as well because the papers were trying to pick up a local angle to these significant findings. The entire problem was discussed at a recent meeting of state administrative officers.

Some of these gentlemen raised the question of the validity of state surveys while others felt that the nega-

tive publicity accruing from many of these objective studies had a bad effect upon the popular attitude toward public education. A few of them carried this attitude to the extreme by declaring their belief that all adverse publicity relating to public education should be condemned as a general policy and any critical comment strongly discouraged. Fortunately these individuals were in the minority.

As a general policy nothing could be more shortsighted and disastrous so far as public confidence is concerned than the official denial of the weaknesses of public education in the United States. Antiquated and expensive structures, poor methods of financing, obvious inequalities in educational opportunity, poor housing, inadequately trained and overworked personnel, large areas in which children are being denied their educational birthright, inefficient teaching and the weakness of the curricular programs to meet present day needs are so obvious to the professional and have been so thoroughly aired that even the layman is increasingly aware of institutional weaknesses. Not only is a psychopathic attitude of supersensitivity to the weakness of public education dangerous but it goes further and may be classified as stupid.

The public schools belong to the people. They can be improved only as the people are actually taken into partnership and are thoroughly acquainted with the purpose, the conditions and the needs of the schools. Any theory that the people in these unsettled times are going to contribute increasingly larger amounts on the mere say-so of the professional educator is due for rude handling. Every social institution has weaknesses. There is no possibility of hiding this fact. These weaknesses in the schools can be improved only through more adequate support and the greater application of intelligence of the personnel engaged in their operation. The schools cannot afford any greater detachment or seclusion from life. They must become increasingly more dynamic in both character and practice. Any plan or program that seeks to eliminate a constructively critical approach to the problem of public education will fall far short of its mark and will ultimately be harmful to the improvement of public education.

A survey such as recently completed in New York State will be helpful over a period of time both to the

people and to the schools. It might well serve as a model for other states to follow. There is only one safe policy in educational interpretation: Tell the truth!

Federal Support

THE question of federal aid is again before the people, the teaching profession and the United States Congress. A distinct modification of the Harrison-Thomas-Fletcher Bill has been presented to the Congress under the sponsorship of the National Education Association.

Federal aid to public education is absolutely essential if the inequalities in program between states and individual economic inequalities are to be rectified. The resources of the several states vary greatly. The southern states will require special aid for at least a ten year period if they are to maintain satisfactory educational facilities for the children and adults within their boundaries. Only the federal government can possibly equalize personal economic inequality to permit all children to profit from the educational programs provided.

While we have always contended, and still believe, that the individual states should first clean house through overhauling and modernizing their district structure, there will be need for continuing federal aid for a number of states even after this important and essential task has been accomplished.

A realistic view of federal aid also leads to the conclusion that federal aid will not be given without control and that, from a practical standpoint, it will probably be extremely difficult, if not actually impossible, to pass through the Congress any equalization scheme in terms of general aid. It is theoretically possible to obtain federal aid without control but a careful study of federal aid policies in many areas since 1890 indicates that this assumption will remain purely and serenely a nice academic theory. Congress is no longer making general grants without attaching definite controls. This federal policy should be recognized as a rational and sensible procedure. In our estimation it will be impossible to obtain from the current Congress any educational bill that does not have in it definite elements of federal control.

In addition, it is most doubtful whether any new appropriation bill will receive much consideration or active support from the present Congress despite the suave assurance of education's professional lobbyists to the contrary. There is a definite popular demand for reduction in federal expenditures. There is also the need for large increases in the expenditures for national defense, with the further demand that all essential appropriations be made with no increase in taxes, coupled also with a pegging of the national debt at its 1939 level. New projects, particularly of a highly

controversial nature, will have little chance under these conditions.

What, then, are the prospects for essential federal aid to education during the current year?

The federal government is now appropriating nearly four hundred million dollars a year as emergency aid to public education. This depression policy has been established and is receiving more than one party support since it affects and stimulates many areas of secondary economic endeavor. Judging from the discussions within the states and in Washington, it seems probable that Public Works Administration will continue with the added possibility that the Works Progress Administration may be more closely correlated with it. A continuation of this federal policy will make possible essential repairs as well as enlargements to the school plant, thus relieving the states of at least half of the capital extension burden and also decreasing the current expense budget by providing the major amounts for plant repairs and renovation.

The aid given by the federal government for the repair and erection of new buildings is a total aid to public education. By relieving the state and local budgets of this burden such aid will make possible larger increases in their current expense, which makes more money available for teachers, possibly smaller classes, more textbooks and library books and other essential instructional material. It also means federal aid without continuing control. When the buildings have been completed they will be used by the local community under state direction. Freedom from federal direction in program and organization is essential to the continuity of our democratic system of public education.

Federal subventions, through National Youth Administration work scholarships, also will continue as a federal policy. These aids, which have enabled many thousands of children to continue their secondary and advanced education despite the handicaps of the depression, are one of the finest of the emergency activities carried on by the federal government. They represent an attempt to equalize economic inequalities. Strange as it may seem, the idea did not originate with the teaching profession but grew out of lay inspiration.

Some of the independent federal ventures into the field of direct education for the adult and the pre-primary child may be more closely integrated with the local public school programs or possibly even greatly curtailed and discontinued. It is still an uncertain area. The Civilian Conservation Corps will be continued as a direct federal activity. It is doubtful whether any of these emergency projects will be placed upon a permanent basis by the present Congress.

The best chances for a continuation of essential federal aid to education appears to be support of the emergency activities through W.P.A. and P.W.A., together

with support of these N.Y.A. projects that are concerned with individual scholarship grants. These current federal emergency policies will be gradually crystallized into permanent policies and offer the best practical solution for federal aid to public education.

Closing a School

THE recent announcement by Dean William F. Russell of Teachers College, Columbia University, that New College will close its doors at the end of the current academic year brings to an end what promised to be a most interesting and significant educational experiment in teacher training. Students who chose this experimental plan for their training are invited to finish their work at Teachers College or other institutions and the faculty will be disbanded.

The reason advanced by the dean is that the college cost too much and could not pay its way, offering instead to the parent school, Teachers College, an annual deficit that it could not afford to carry. Since Teachers College has practically no endowment and is self-supporting, with current financial difficulties of its own to worry about, it is obvious that additional financial burdens are not welcome.

Many who were interested in the possibilities of New College are asking the question why responsible administrative and budgetary control was not provided when these deficits first became apparent and whether a contract entered into between a student and an institution should not be carried to its orderly completion even if unforeseen loss is incurred. Students who entered this curriculum in good faith should have been allowed to complete it. Institutions no less than individuals should recognize their obligations.

Speaking of the I.Q.

THE old struggle is on again. Is the I.Q. constant? Does it change? For a comparatively long period of nearly twenty years, those psychologists who preached the unchangeability of the I.Q. held absolute sway. To question them was definite evidence of heresy. However, cautious experimenters who were constitutionally opposed to determinism in any form began their efforts to find whether these psychologists were right. Many isolated reports have been made of significant changes in the I.Q. in certain individuals over a given period.

In January 1933, as a result of intensive and extended research, Stuart A. Curtis ventured the assertion in these pages that the I.Q. should be considered as a developmental ratio rather than as an absolute. It evoked some discussion at the time but quickly died down.

A few months ago Graduate Dean George C. Stoddard of the State University of Iowa presented evi-

dence, also based upon unimpeachable research, that nurture or environment is a definite and important conditioning factor in intelligence and his conclusions indicate definite possibilities of change in the intelligence quotient.

Dr. Leta S. Hollingworth, who has conducted research with gifted and dull children in the Speyer School over a comparatively long period, stated in late November that her results show that the children possessing the highest I.Q. are in the same position with regard to the rest of the population when they are full grown, thus indicating a stand in favor of the constancy of the I.Q.

Now comes Doctor Karl M. Bowman, director of the division of psychiatry of the department of hospitals in New York, who refuses to agree with Professor Hollingworth, stating that:

"I have seen children with low I.Q.'s develop into higher intelligence brackets. I have seen children with high I.Q.'s fall to lower I.Q.'s with growing maturity and I have seen children with normal intelligence later show a retarded and lower I.Q. Whether the mistakes are made in the examinations I don't know, but we have found definite cases of changes in intelligence quotients."

While waiting for round four, may we venture to add Curtis' 1933 observations that "a low I.Q. may be caused by: (1) actual deficiency in nerve and motor mechanism organization or both; (2) the development of faulty habits of response; (3) a low incipency; (4) deficiencies in training or experience; (5) individual peculiarities in patterns of development. The I.Q. is a relative and not an absolute measure of the rate of growth."

Equal Distances

J. FRED HORN of the Texas State Education Department tells a story that adds some color to the literature of school plant operation. While inspecting schools in one of the dry spots in the Lone Star State he visited a rural building that was enhanced, if not beautified, by having an old army type of water cart backed up near the front door. Somewhat surprised, he asked the janitor-driver why they were using such equipment.

"Haulin' water fer drinkin'," came the reply.

"How far?" asked Horn.

"Five miles," was the curt answer.

"Have you ever thought of driving a well?" ventured Mr. Horn.

"Yup," said the water man.

"Why don't you do it and save this trip every day?"

"Taint worth it. Hit's five miles either way."

The Editor



Sloan Hall houses the Institute for Consumer Education at Stephens.



Stephens College girl gains practical experience in consumer problems.



Educating

ALMA MATER is taking sober second thought about her daughters. For a century now, despite their higher education in philosophies almost as neuter and sexless as "x" and "y," college girls, she has found, still will be girls. Whether in the traditional rôle of wife and mother or in newer vocations outside the home, by and large in their after-college lives they still play a distinctively feminine part.

Now more than one alma mater is setting out scientifically to determine just what that part is under modern conditions. She is beginning to wonder whether her graduates would be even better adjusted if somewhere in their school and college training this more or less manifest destiny were taken into account.

Through generations of examinations and grades women have long since proved that they can assimilate and profit by the standard college education of men. No intellectual inferiority complex, therefore, today stands in the way of developing for them a college course more specifically suited to their needs as women.

Lower left: Studying consumer economics from the woman's angle at the Institute for Consumer Education. Below: Reading period in the lounge at Sloan Hall.



Women as Women

EUNICE
FULLER
BARNARD

Educational Director, Sloan Foundation

Slowly, sporadically, colleges of various sizes and types, as well as a few school systems from one end of the country to the other, are daring to experiment in new plans of "educating women as women." In the process the colleges and schools themselves are gaining a new view of what it means and what it takes successfully to perform the rôle of a woman in modern life.

Emphatically, this is not the "back-to-the-kitchen" movement of the dictator countries. Rather, it is part of the opposite trend toward centering education about the needs and interests of the individual, rather than about prescribed subjects. Its apologists are devotees of the philosophy that education is made for man, or woman, and not man for education. It is the same theory that is leading some high schools recently to try to prepare their pupils to meet the exigencies of life as well as college entrance requirements.

As to exactly how one goes about educating women as women, however, there are almost as many viewpoints as there are colleges and schools experimenting with the problem. Some of them believe that girls should be trained along the lines of the traditional activities of adult women. Others hold that these should be more sharply inves-

tigated and defined in terms of the proved interests of present day women college graduates. Still others would base the new education for women mainly on their own students' immediate desires and needs.

For years, to be sure, many colleges and schools have made certain obvious concessions along the lines of the first of these approaches. State universities have installed schools of home economics, albeit generally more as trade schools than as any part of women's basic education. Academic high schools have included home economics courses, frequently, however, rather narrowly interpreted in terms of cooking and sewing.

Even some of the conservative women's colleges of the Eastern seaboard, whose programs are largely patterned after the strict liberal arts curriculum of the men's colleges, have added nursery schools and courses in child psychology. Usually, like the university home economics departments, however, the nursery schools have been devised with an eye to specialized vocational training. Rarely have they been primarily intended to contribute to the general

culture and intelligent outlook on life of the average woman.

Of them all, perhaps the "euthenics" course at Vassar comes nearest to such an attempt. Under this system a student is allowed to major, so to speak, in the betterment of living more or less from the woman's viewpoint. To do this she selects from various departments sequences of subjects relating to child welfare or to public health. The former has a wider scope than the name implies, including courses in marriage and the family, nutrition and sociology, as well as child hygiene and child psychology.

Any synthesis that the student makes of them, any orientation that she obtains from them in her own future rôle as a modern wife and mother, however, she works out for herself under tutorial guidance. As a matter of fact, relatively few Vassar students elect to follow the euthenics program, and it has thus far remained a minor aspect of the general college work.

Essentially different is the newer effort of a few pioneering colleges which are attempting to give all their girls not only the information and

No intellectual inferiority complex need stand in the way of the development of a college course more specifically suited to women's needs of today.



skills but also the general philosophy that will best fit them for their future life as women in the modern world. These colleges are basing their new programs not on traditional concepts but on research studies of the actual interests and activities common to present day women or to their own students. These colleges' original discoveries are bringing completely new emphases into the educational program. For the detailed care of "Küche und Kinder," while still important, they find, is by no means the whole of the modern woman's task.

Indeed, Stephens College, a junior college of some 1300 girls in Columbia, Mo., which for eighteen years has been engaged in a most thorough-going investigation of women's everyday problems, has marked off seven other types of education as of even more fundamental importance. From the analysis of diaries kept along specified lines by 300 women college graduates in 37 states, the Stephens research staff found, for example, that one major rôle of women, married and single, is that of consumer, of purchasing agent for the home.

It is the woman who, as a rule, makes the major choices about how the family income both of time and money shall be spent, not only for food, clothes and shelter but for health, culture and recreation. It is she, by and large, who decides whether the house shall have chromos or Corots on its walls, whether Susie shall have music lessons or more money for the movies, whether the family shall patronize the chain store or the corner grocer. No factor in the cultural or the economic life of the nation is more crucial than this power of women. Yet until the last few years it has been largely neglected in their education.

Stephens has met this exigency by arranging almost every one of its courses to touch this problem. Everywhere the girl is made conscious of her power of choice and its far-reaching effects. In doing this, of course, she must to some extent formulate a philosophy of living. She must answer the question: "What things are for me most worth while?" She is brought face to face



Educating women as women in the New York City schools. Cooking demonstration in progress at the Franklin K. Lane High School, Brooklyn.

with the fact that she has a limited amount of energy, time and money at her command: how can she spend it in the best interests of her own development, that of her family and the general social welfare?

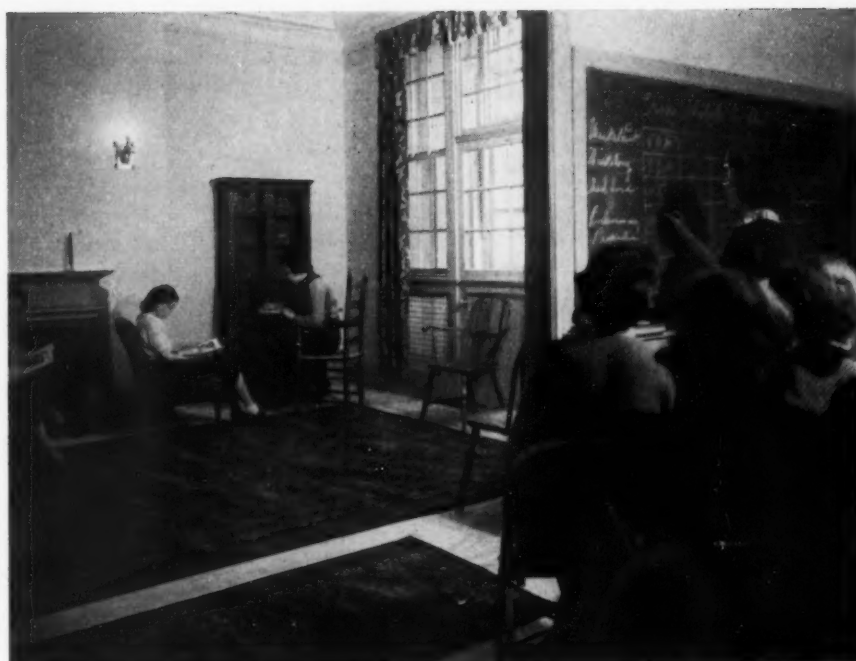
Recently the Stephens consumer program has received still greater impetus by the founding on the campus of a national Institute for Consumer Education with the aid of a grant from the Alfred P. Sloan Foundation. A five year program has been outlined, in which, with a highly trained staff and a specialized library housed in a new building, further possibilities of this aspect of women's education are to be strenuously investigated. Not only will the Stephens course in consumer problems be strengthened but the benefits of the institute's various researches will be made available to other colleges, to high schools and to adult study groups. Books, articles, radio programs and motion pictures will carry the institute's findings to all parts of the country.

Other characteristic needs of women, irrespective of vocation, that Stephens has made the basis of its curriculum, are physical health; mental health; esthetic appreciation, including art, literature and music; intelligent civic relations, covering a grasp of major social, economic and

political problems; a philosophy of living, and efficient technics of communication, with more than the usual emphasis upon speech making and other forms of oral, as well as of written, English.

Homemaking, as such, is not as yet a required subject at Stephens. Along with courses in other vocations, however, it is a popular elective. Since a great majority of Stephens graduates marry within five years, the faculty is now considering including some survey of homemaking in the "must" list. Already so large a proportion of the senior class elects the course on marriage and the family as to make a requirement for that aspect of the subject almost superfluous.

Other colleges that have made new programs of education on the basis of surveys of women's interests are laying slightly different emphases. Russell Sage College, in Troy, N. Y., for example, which has studied the lives of its 1200 graduates, requires all its students, whatever their major, to take four specific courses aimed at preparing them effectively to "participate in the activities that will claim their attention as modern women of high ideals." One of these courses is a year's survey of the "art and science of homemaking," given jointly by professors of biology, so-



Attractive model apartment for homemaking classes. Both pictures are from "All the Children," the New York superintendent's graphic annual report.

ciology, fine arts, philosophy, physical education and home economics. It includes all aspects of family life from preparation for parenthood to interior decoration and interests of the ideal home.

The three other "must" courses cover the growth and development of children, American government and politics (to prepare the girls to take their part in community affairs) and the "art of living." This last is intended to help the student integrate her philosophy of life.

Essentially similar to part of the Russell Sage program in purpose, though on a different level of maturity, are the so-called homemaking courses for girls offered in whole or in part in various high schools of New York City. They, too, are intended to make up a study of "the art of living," whose sum and substance is not to be bits of information but "something built into the very being of the girls."

All in all, they touch on almost every daily problem in a young woman's life, from personal regimen to family purchasing and child development. Fully mastered, they are expected to inculcate "the ideal of a successful home with an understanding of its financial problems and social relationships." So wide is the scope of these studies that one of the

most academically minded superintendents in New York has termed them "the most cultural courses for high school girls I have ever seen."

Somewhat different is the approach of the progressive Sarah Lawrence College at Bronxville, N. Y., to its avowed endeavor to develop an education with a "decidedly feminine orientation." There the faculty in every department is "exploring the possibilities of a more realistic approach to the arts, sciences, literature and the social sciences from a woman's point of view."

"In course after course, whether dealing with anthropology, psychology, history, economics, philosophy, biology or literature," writes the president, Dr. Constance Warren, "live-liest group discussion revolves about family relationships, problems and situations. Our students are free to choose their own objectives in life and to prepare themselves accordingly, and the fact that marriage more often than not appears in the foreground of their picture of the future has influenced not only the college's approach to traditional studies but the evolution of integrated courses in the family, child psychology, homemaking and preparation for marriage.

"Sarah Lawrence College takes into account the profound part

played by a woman's emotions as well as her intellect in developing her powers to the full . . . a factor in her education too likely to be neglected. We have come to realize that both emotions and intellect benefit by creative work. In recognition of the value of the arts, not only for the student who intends to use her talent professionally but for the well-balanced development of most women students, Sarah Lawrence College has always placed the arts on an equal basis with other intellectual fields."

A similar regard for girls' intimate present desires is being taken into account at Adelphi College on Long Island, N. Y., where the whole course is being reoriented under the guidance of Dr. William H. Kilpatrick, white-haired teacher of teachers and professor emeritus of Columbia University.

Through personal interviews and individual and group tests, the college is exploring the vital individual interests of its students. In remaking its general science course, for example, the college has started by finding out what the girls already know and what they feel they want to know. If they are curious about glands or vitamins or reproduction, that will be for them a point of departure.

"Women have got through aping men in their education," said President Paul Dawson Eddy. "They are setting out to find their own rôle."

One of the surprises of this search of woman for an education of her own is the fact that in the process she is emphasizing a kind of learning more and more recognized as vital to men as well. Courses in marriage and the family are rapidly becoming a commonplace part of general culture, both in men's and in coeducational colleges.

"A man's home adjustment problems are certainly as acute as those of woman," wrote Malcolm S. MacLean, director of the general college at the University of Minnesota, recently, in pleading for marriage and home courses for both sexes, "although they may differ somewhat in kind. His solution of or frustration in them has direct and powerful bearing on his whole pattern of life and satisfactions in living."

What Makes Education Tick?

WALTER D. COCKING

IN THE century and half of its development American education has shown remarkable gains that social, economic and political changes have made necessary. Today the school must cope with problems that were once the problems of the individual rather than of the community. In 1850 the public schools of America enrolled only 3,500,000, whereas today the annual enrollment is approximately 30,000,000. Just as enrollment has increased so has the scope of the curriculum been expanded. In like manner other functions and phases of the educational system have witnessed profound changes. Development of the organization and administration of America's school system has been fundamental.

Among the studies of the President's Advisory Committee on Education, one of the most elaborate was a nation-wide study of the organization and administration of public education.* The major purpose of this study was to determine the character of the organization and to evaluate the effectiveness of the administration of public education in the various states and local school units. In the study undertaken by the committee on the organization and administration of public education, answers to the following questions seemed important:

1. What legal handicaps to the development of proper organization of public education exist in the states?

2. What place does education occupy in the administrative structure of state and local government?

3. Is there a common pattern of school organization in various states through which a program of general federal aid to education can be effectively administered?

4. Is the quality of the personnel

administering public education such that it is reasonable to expect that federal aid will be used intelligently?

5. What are the present relationships between federal, state and local units of government in the administration of the educational function?

6. Are the present state and local organizations of the system of public education and the methods of administering it such that there is reason to believe that federal aid for education will be wisely used and administered?

In attempting to answer these questions, all phases of state and local governmental organization relating to education were studied. It was realized that education is not an inde-

The most thorough study of the organization and administration of education ever made in America is outlined by the dean of the college of education, University of Georgia

pendent governmental activity but is closely coordinated with other public services; the governmental management functions of planning, financing, purchasing and personnel have a direct and important relationship to the administration of a system of public education. In gathering data for the study an attempt was made to develop detailed analyses of the various types of state and local governmental organization and to evaluate the efficiency of each. Three principal procedures or sources of information were used in assembling data:

1. Through field trips to each of the 48 states detailed data were obtained on the following items as they relate to the system of public education: the general organization of state government; the state judiciary;

the legislative branch; the executive branch; independent boards and commissions; the organization and administration of education; the state's fiscal system; the state's system of personnel management; the machinery for the coordination of education and other governmental services; the administration of federal aid for various state services, and state planning for education. The field staff in the collection of data interviewed a total of 829 state officials, or an average of 17 per state.

2. An analysis was made of surveys and research studies dealing with the reorganization both of general government and of education in the state. Special attention was given inadequacies of organization revealed by these studies, inefficient patterns of organization and proposals regarding acceptable forms of organization, with special reference to education.

3. An exhaustive study was made of the general literature in the field of state governmental organization. Surveys in the general field of public administration as well as in educational administration were included in this analysis.

The report of this study probably presents the most complete picture of the organization and administration of education in America that has ever been made. The study, on the other hand, is not an exhaustive one in that it does not deal with many interesting problems that have relatively little importance to the problem of federal aid to education.

From the methods employed a large body of material was collected relating directly to the problems under consideration. Analyses and interpretations were made and pertinent conclusions drawn. Certain problems were recognized as pertinent to future improvement of the organization and administration of education. It should be pointed out that the study did not deal primarily with recommendations. The fundamental purpose was to present the facts that were most pertinent to federal aid for education.

*Cocking, Walter D., and Gilmore, Charles H.: *The Organization and Administration of Public Education*, The Advisory Committee on Education, Staff Study No. 2, Washington, December, 1938.

Next for Junior High School

EARLY proponents of the junior high school movement were optimistic in their claims for what a mechanical reorganization of a school system could accomplish in meeting specific problems confronting education at that time. They prophesied that this new institution would decrease the mortality rate of pupils dropping out of school somewhere in the ninth and tenth grades of the senior high school. Little did they dream that the day would come when social and economic forces would keep pupils in secondary schools whether they profited by what the schools had to offer them or not.

Another claim for the need of the junior high school was that it would bridge the gap between the elementary school on the one hand and the senior high school on the other, thus providing a continuous program for the pupil. At this juncture we might raise the question: Why should there have been a gap between the two schools in the first place?

A third claim was that reorganization would make it possible for pupils to begin the study of secondary subjects, such as algebra, geometry, Latin and science earlier than they would otherwise.

These claims made by outstanding men in education were sufficient to stir the imagination of school administrators to the extent that once the movement began, junior high schools were springing up all over the country. Later it became necessary for such men as Dr. Thomas H. Briggs, Dr. James Glass and others to formulate new objectives to guide those who were working in this school. Some of these objectives are no longer peculiar to the junior high school because of our changing conception of education. The exploratory function is an excellent point in question. But why should not all education be exploratory?

This new movement, handicapped from the beginning because of several situations, has not paid the dividends to society that it might because of certain limitations. The

Handicapped by tradition at its outset, the junior high school has become a hybrid unit of elementary and secondary education. A new approach is suggested by the principal of Pipkin & Reed Junior High Schools, Springfield, Mo.

V. M. HARDIN

innovators, in their eagerness to reorganize the schools, mistook the form for the substance. They assumed that a mechanical reorganization would solve the whole problem; consequently, their worries for the future would cease. The most ardent friends of the junior high school now realize that mechanical devices are no positive guarantee of intangible values.

We pass by the fact that a few administrators were influenced by the promised publicity that would satisfy their ego. They could go to the Department of Superintendence meetings and boast to their fellow superintendents, "We did it."

The second handicap was the unfortunate manner in which the reorganization of the school system in many instances was brought about. This provided for either the subsequent downfall of the junior high school in a few cities or the neutralization of its influence in many others. Teachers had little or no opportunity to participate in a study of the need for the junior high school, nor did they have sufficient opportunity to understand just what the function of this new member of the educational family should be. The result was that jealousy, suspicion and antagonism developed to such an extent that the administration found itself seriously embar-

rassed on more than one occasion. It would be an interesting study to discover just how sympathetic the average traditional high school is toward what was once considered an intruder.

The greatest handicap, however, was that administrators had no precedent or pattern to guide them in determining just what the nature of this new organization should be. Little pioneering was done to build a program in harmony with the needs and interests of the adolescent youth. While the following statement may seem a bit unfair, yet the evidence points to this conclusion: The administrator reached into the senior high school with one hand and pulled out the ninth grade with all of its appendages; then with his other hand he reached into the elementary school and pulled away the seventh and eighth grades. Having completed the pulling process, he proceeded to shove the three grades together and said, "What a smart boy am I!"

His next problem was to decide what kind of organization this new school should be. Should he pattern after the elementary school? No, because the name of the new unit would not permit that. The senior high school seemed to be the ideal at that time; therefore, he took his cue from this institution. As a result, the hand of tradition took a firm grip from which it has been exceedingly difficult to obtain a release. Departmentalization of subject matter, units and credits for graduation, graduating exercises, competitive athletics, methods of evaluation and other characteristics too numerous to mention became part and parcel of the new school.

Now let us consider some of the significant problems confronting the junior high school today. In order to meet these problems satisfactorily we must study them intelligently if we are to achieve an adequate perspective or a proper sense of direction. As we view the program of the modern elementary school we find that this organization is going rap-

idly in the direction of the activity movement; units of learning experiences, some of which are planned cooperatively with children; implications of Gestalt psychology for learning, and democratic relationships on the part of teachers with pupils and pupils with pupils. We find children participating in community surveys and utilizing local resources for broadening and enriching their understanding. Subject matter skills and technics are being developed for socially useful purposes.

What does all this mean for the junior high school if the education of the child is to be a continuous process? Shall the junior high school pattern after the elementary school? If it does not, then the child comes out of a natural environment, one in which he has a feeling of belonging, to a strange and unnatural environment which destroys those values he has achieved. Particularly is this true if the junior high school is steeped in traditional practices growing out of its relation with the

senior high school, which frequently perpetuates a curriculum for the aristocracy.

It has been suggested that this situation be met in the first part of the seventh grade by providing orientation courses which gradually lead into a highly compartmentalized program. The danger of this is the risk of having a dualistic program on our hands, which would tend to defeat us as we strive to serve the needs peculiar to adolescents.

A second challenging problem in certain quarters is this: What shall be the answer to the senior high school that regards the junior high school as a preparatory institution or training ground for the high school? The common complaint of teachers in the school of the next level is that pupils do not know a verb from a dangling participle, that the date of Columbus' discovery of America is to them only a telephone number and that they are wholly lacking in the ability to worship at the shrine of technical mathematics, physics or Latin. This stock criticism is only one of several indictments.

Possibly the best procedure would be to cease looking for a pattern that has been developed by any one unit of the school system and try to see the problem of education in the large. Administrators and teachers of all levels of the school system should face this question: What kind of a program will continuously and increasingly satisfy the needs of pupils in a rapidly changing social and economic environment?

This kind of approach would have these advantages: It would make for better understanding of the school as a whole on the part of teachers, thus giving us a sense of unity. It would come to grips with the implications for education growing out of the life of which the pupil is a part. It would help evaluate present practices for the purpose of making modifications where modifications are needed and of retaining practices that possess the greatest worth. Finally, it would develop a purposeful, meaningful attack on our common obligation to the end that both the pupil and society would profit by these cooperative efforts.

A Device to Improve School Marks

W. W. KRUMSEIK

High School Principal, Auburn, Ill.

AMONG the many problems that confront the secondary school principal and the faculty is that of trying to get pupils to work up to their capacity. The suggestion I am about to make may have been used but I do not recall having heard of it.

Many parents do not know what honestly to expect of their sons and daughters in the way of either grades or achievement, my experience indicates.

Most parents who have the child's education seriously in mind will welcome a letter such as the one we send:

Dear Mr. and Mrs. Blank:

According to information in the school office (which we believe to be, in a sense, scientific, and which represents the best judgment of the members of our faculty) your son George has the ability to do much better work. He has been getting "C's" and is capable of getting "B's" with a little more effort. We believe, therefore, that in this particular you should not be satisfied to have him bring home anything less.

Respectfully yours,
High School Faculty,
Principal.

Pupils who are doing satisfactory work are commended to parents in an annual letter from the principal's office. This letter gives the number of credits earned thus far.

To parents of pupils who are really slow, weak or poorly prepared or whose ability is limited, we send an-

other letter urging an adjustment in curriculum and suggesting methods for improvement of fundamental processes. But that is another story and one that will not be considered here.

We find that in a large number of instances parents are pleased to know just what their sons and daughters are capable of doing scholastically. They also are glad to learn that we know a little about what should be expected and that we are interested enough in the pupil and his welfare to communicate with them. We tell pupils in advance that these letters will be sent, especially after we have urged better work.

Technically, we do not have many data for such judgment. We use intelligence quotients and achievement tests, together with marks of teachers. No charts are made.

I have no generalization to make or claim that the plan works wonders. It does not do that. However, it is a good device because pupils afterward make better grades (which is not all-important) and they realize what they could do if they tried a little harder.

I truly believe that a great many school principals do not give parents enough information often enough. This sort of plan takes time and energy but it also saves time and energy. Moreover, it keeps the teacher from being constantly on the defensive.

Evaluating a Club Program

ENID S. SMITH

Dean of Women, Bethel College

IN ANY large high school that places emphasis on extracurricular activities there are potentially three types of clubs, judging from a recent five year study made of 60 clubs in the McKinley High School, Honolulu, and checked with other schools in the Islands.

The school in which this study was made had approximately 3000 pupils of some 16 nationalities, Americans, Europeans and Orientals. The three types of clubs found were: (1) live, flourishing clubs embodying wholesome, educative characteristics; (2) clubs in a precarious state of health, failing because of destructive, disintegrating forces inherent in them; (3) clubs that were on the borderline between extracurricular activities and regular classroom instruction or were in a state of becoming absorbed into the curriculum.

At the end of the five year period 66 per cent of the 60 clubs were still alive and flourishing; 22 per cent were nonexistent, and 12 per cent had been taken into the curriculum. The criteria against which the three types of clubs were checked were the standards set for a live, flourishing club in the literature of extracurricular activities. The technic used in obtaining the data from these clubs will be briefly described.

Rating the Organizations

Once every semester during the five year period, the following questionnaire, with a five point scale opposite each question, was given to all the members of each club that they might rate their organization by checking one of the squares of the descriptive scale, according to their best knowledge and judgment. The five divisions of the scale consisted of "very good," 100 to 75 per cent; "good," 75 to 50 per cent; "fair," 50 to 25 per cent; "poor," 25 to 1 per cent; "very poor," 1 to 0 per cent.

1. Do you like this club?

2. Do the members respect the club president?

3. Do the members respect one another?

4. Is the club businesslike?

5. Is there growth in knowledge?

6. Is there growth in leadership?

7. Is there provision for individual differences?

8. Does the club help you develop a desirable character?

9. Does the club help you develop skills?

10. Does the club help you in your class work?

11. Does the club help you in your home?

12. Does the club help your school?

13. Does the club help your community?

14. Is the club democratic?

15. Is the president satisfactory?

16. Is the sponsor satisfactory?

17. Do the members cooperate in the club's work?

Computing Results

The results from this questionnaire as well as from all questionnaires in this study were computed after the following manner: The percentage of each separate question on each section of the scale for the aggregate membership was worked out, with due regard to the changing number of members in different semesters. To illustrate, the composite returns from a certain club on the first question were 52 per cent, "very good"; 31 per cent "good"; 10 per cent "fair," and 7 per cent "poor" (there was no scoring for "very poor").

In order to compare these results with findings of the same club or different clubs in different semesters, it was necessary to obtain, through weighting, one figure for each question, and to reduce this figure again to the 100 percentile basis. Consequently, "very good" was arbitrarily given a weight of 5 on the 5 point scale; "good" was given 4; "fair," 3;

"poor," 2, and "very poor," 1. Taking the foregoing example in which 52 per cent of the members of a club indicated their liking for the club under "very good," the respective weights were 260, 124, 30 and 14, totaling 428. When reduced to the 100 percentile basis, dividing by 5, this came to 85.6 per cent.

In like manner, every semester three raters (the dean of girls, an assistant teacher and a member of the student council) went unobtrusively to each club, sat in the back seats and rated the club presidents on the following questionnaire with its accompanying five point scale: (1) self-control, (2) judgment, (3) fairness, (4) enthusiasm, (5) patience, (6) courage, (7) reverence, (8) humility, (9) graciousness, (10) alertness, (11) resourcefulness, (12) progressiveness and (13) cheerfulness.

Likewise, the three raters visited every club each semester and rated the sponsors, using the following questionnaire accompanied by the five point scale: (1) interest in the club, (2) command of pupils' respect, (3) willingness to permit the pupils to lead, (4) guidance ability when called upon, (5) knowledge of the subject matter, (6) enthusiasm, (7) fairness, (8) resourcefulness, (9) friendly relations with pupils and (10) promptness at meetings.

Checking Is Unobtrusive

In the case of the sponsors, as with the rating of the presidents, it often was necessary to return several times to various clubs to observe definitely each item enumerated on the questionnaires, since no president or sponsor could be expected to show in his conduct all the enumerated factors in one day. The pupils were accustomed to visitors from other clubs and from the faculty, so the checking of a questionnaire in an unobtrusive way caused no embarrassment. A signal system was used among the raters when they were ready to pass to the next club.

The interview schedule was divided into two parts, the first consisting of items 1, 3, 4, 7, 8 and 12 accompanied by the five point rating scale and taken from the questionnaire on club presidents, together with items 3, 5, 6 and 10 from the questionnaire on sponsors, to be checked by the pupils at the time of an interview in the dean's office. The second section asked two questions: (1) In what way or ways do you think the club helps you, your school, your homes, or your community? (2) In what way or ways do you think the club could be improved?

The observation data sheet, in the hands of the three raters, near the beginning and close of each semester, was designed to obtain definite objective evidence of the influence of the clubs on school, home and community. It consisted of two parts.

I—Club, Home and Community

1. Do you observe any objective indication of work or influence that might be attributed to this club? What?

2. Does the conversation in regard to the object or subject in question indicate that the influence of the club was responsible for it?

3. How extensive is this influence of the club? (Estimate objectively if possible.)

4. Record excerpts of conversation that show the attitude toward the club on the part of the individual, the home, the community.

(Probable influence on club as the result.)

II—Club, Individual and School

1. What do you see the club members doing? How are they doing it?

2. What do you hear the club members say?

3. What is the sponsor doing?

Observation of Special Pupils

1. What is the pupil doing?

2. What is the pupil saying?

Although the tabulation and evaluation of the data obtained from the observation data sheet were problems, as were the numerous visits to homes and to club rooms, yet these data showed the far-reaching influences of the clubs, served to supplement case histories of the clubs and were a further check on other data.

The club projects were ranked by 56 teachers selected on the basis of their club experience, interest and willingness to cooperate. Each ranked the projects in order of their worth to the school and community, according to his best knowledge and judgment. Since the number of clubs varied each year, it was necessary for comparative purposes to weight the projects according to the number of clubs for the year, and then to translate them in terms of a 100 percentile scale.

Comparison of Projects

To illustrate, in a distribution of 40 clubs the highest ranked group of projects for any club would receive 40 points, which translated into terms of the 100 percentile scale would be $2\frac{1}{2}$ times 40, or 100 points. Likewise, the second highest in rank would receive 39 points, which when translated would equal a weight of $97\frac{1}{2}$ on the 100 percentile scale. Thus the various projects could be compared throughout different years, as well as with projects of other clubs.

Club histories were kept by the investigator with the aid of her trained assistants, sponsors, raters and teachers. They used the excerpt method of reporting the exact words of speakers; likewise they recorded objectively all observations. The following club history record sheet was used in order to direct observation:

1. Before the meeting starts record exactly just what is seen and heard.

2. Attendance.

3. Number taking part in the discussion.

4. Number of visitors present and taking part.

5. Promptness of opening and closing of meeting; promptness of members, president and sponsor.

6. Report of the meeting as to proceedings, including the program, the content and methods of handling it.

7. Report of work on projects.

8. Observation after the meeting; report definitely what was done and said.

The club history in that it gave a picture of the details of procedure of a live, throbbing entity was probably the most complete and satisfactory source of data, as well as, in this instance, a technic. The difficulty of

having several people working on the histories was satisfactorily overcome by the uniform questions of the history record sheet.

Despite fluctuations from year to year, the fact that one or two clubs did not run true to type and the difficulty of generalizing from averages, the club members rated the live and curriculum-absorbing clubs high (75 per cent or above) on such characteristics as liking the club, respect for the president, respect for one another, businesslike and democratic methods, satisfactory president and member cooperation. There was a correspondingly low rating on these factors and on all others in the dying clubs.

The ratings on the club presidents of the live and curriculum clubs were high, particularly in the factors of self-control, judgment, fairness, enthusiasm, courage, respect, alertness, resourcefulness and progressiveness, while the dying clubs rated uniformly low on all factors. Their nearest approach to an average rating was in their bravery, courage and strength of their convictions.

Sponsors Rate High

The ratings on the sponsors of the live and curriculum clubs was uniformly high in respect to interest in the club, command of pupils' respect, guidance upon request, familiarity with the subject matter of the club's interests, enthusiasm, resourcefulness, friendliness and promptness. The lowest rating in these groups was on "permitting pupils to lead or carry on their meetings without interference unless called upon." The dying clubs rated uniformly low throughout. The only item approaching average rating was the "promptness of sponsor."

The chief differences between the live and curriculum types of clubs were:

1. The sponsors of the curriculum clubs excelled in preparation of the subject of the club's interest, because in most instances it represented their teaching subject.

2. The club meetings were more on the order of regular class periods than club meetings.

3. The curriculum clubs helped the ordinary school work to a greater extent than was true in the live clubs,

and there was greater cooperation in work among their members.

4. The curriculum club presidents possessed more self-control, courage, humility and patience than did the presidents of the live clubs.

5. Curriculum sponsors rated higher in interest, guidance, lack of prejudice, resourcefulness and friendliness with the pupils than the live clubs.

The curriculum clubs, however, rated a little lower in the carry-over of their projects into the home and community than did the live clubs. Their tendency was to increase in size until they became too large for all the members to take part at each meeting. They began to duplicate class material and, finally, to make a compromise with the curriculum and be absorbed into it, with a distinct advantage to both.

Criteria for a Live Club

The characteristics found present in both the live and curriculum absorbing clubs when checked against the criteria for a live, flourishing club according to the literature in the field of extracurricular activities were as follows:

1. The clubs originated from a felt need within the school.

2. The clubs dealing with subject matter were an outgrowth from the curriculum.

3. Clubs were initiated by the pupils, often with the help of teachers.

4. Clubs tended to rate high in interest and liking for the club.

5. Sponsors were selected by pupils and appointed by the administration.

6. Sponsors helped pupils plan their programs and projects.

7. Officers were elected by popular vote and parliamentary procedure was followed in conducting meetings.

8. The administration always furnished sufficient club equipment.

9. Subject matter and religious clubs had a high rating in the factor of provision for individual differences.

10. Clubs tended to be prompt in opening and closing of meetings and were generally businesslike, with the possible exception of some racial clubs.

11. The spirit of democracy was

present to a high degree, except in the honor or highly selective clubs.

12. Clubs offered rest and recreation, with the possible exception of the honor clubs whose work was strenuous and of a trying nature.

13. Projects tended to benefit the school and individuals, with the possible exception of the honor clubs whose work gave little time or opportunity for a diversity of useful projects.

14. A chance was given to do better what pupils would do anyway.

15. Opportunity was given to acquire knowledge and skills, particularly in subject matter, racial, religious and citizenship clubs.

16. Clubs offered experiences that tended to satisfy adolescent needs for sociability and freedom of expression, especially the hobby clubs.

17. Size of clubs did not apparently interfere with success, although a large subject matter club indicated its incorporation into the curriculum was likely.

18. Religious, subject matter and hobby clubs tended to assist members with their future vocational interests and training.

19. Projects of the clubs, the clubs themselves, their presidents and sponsors tended to rank high in the majority of characteristics studied, although there were fluctuations from year to year.

Characteristics of Poor Clubs

There were a few positive characteristics found in the group of dying clubs: they originated from a felt need within the school; they were initiated by the pupils; the members liked their clubs (at least at first); they selected their sponsors; the clubs offered a certain amount of relaxation and recreation; there was an opportunity to learn to do better what pupils would ordinarily be doing in life, and the size of the clubs did not apparently interfere with their success.

The negative factors for the dying clubs were as follows:

1. The clubs did not grow out of the curriculum of the school.

2. Interest and enthusiasm were not present to a high degree in the sponsors.

3. Sponsors were not fitted, in the majority of cases, for the work un-

dertaken. They were not very familiar with subject matter of clubs' interests, neither did they plan programs sufficiently with club members.

4. Presidents were not always elected by popular vote.

5. Meetings were not always conducted according to parliamentary rules.

6. Little provision was made for individual differences.

7. Clubs tended to be unbusinesslike, late in opening and closing meetings.

8. Projects tended not to be conducted for the benefit of home, school or community.

9. Clubs tended to lack spirit of democracy; there was much race prejudice.

10. The play spirit present tended toward rowdiness.

11. The programs of the clubs were not well planned.

12. There was no emphasis placed on learning to perform better the tasks that members would need to perform in their daily living.

13. There was little provision for the development of desirable character qualities.

14. There was little chance to acquire knowledge or skills that would help in future vocational interests.

15. There was slight opportunity offered for satisfying the real needs of adolescent nature, such as sociability, initiative and originality on a high plane.

16. The rank of the projects, ratings of the clubs, the presidents and sponsors, all tended to be uniformly low.

Some of the technics of this study also served as sources of data, the findings of which validated the empirical criteria of the literature on extracurricular activities. Against the standards for a live, flourishing club in the literature, the three types of clubs of the present study were checked. By means of the combination of technics suggested, the characteristics of each of the three types of clubs may be isolated, and their state of growth or decline ascertained. Thus remedial treatment, when necessary, may be applied by those in charge of the activity program in time to save the life of a club that may have educative value.



A modern version of the Little Red Schoolhouse is constructed of structural glass brick and load bearing glazed tile.

Consider This Country School

"**H** E HAD few advantages and his only schooling was in a little country school." Remember how the success stories of famous men always used to include this statement?

The reader had a vision of a dingy little one room building with two ever present external features, a pump and a doubtful little building at the rear that provided what passed for "sanitary" arrangements. Both pump and the little building were uncomfortable accommodations during the stormy, cold months of the rural school term.

Indoors the country school was badly lighted and heat was spread by a fat coal stove that pinked the cheeks of the pupils who sat near by and chilled the backs of those farther away. As the day advanced the air of the unventilated room became stale and escaping smoke made young eyes red. Men and women who became successful after spending their teens in this kind of an environment should be acclaimed!

That was the country school of yesteryear. Today the up-to-the-minute country school compares favorably with the city school and may excel it in beauty, utility and careful provisions for the health and comfort of pupils and teachers.

A modern version of the country school is the new Cool Springs School, 6 miles from Michigan City, Ind. Designed by Architect John Lloyd Wright, son of the famous Frank Lloyd Wright, the Cool Springs School is a model educational structure.

Tasteful modernism, structural glass brick and the most modern plumbing and heating were utilized by Mr. Wright to make the Cool Springs School a place in which teachers can truly teach. But this handsome building is more than a school. It is a community inspira-

tion, directing the attention of the parents—Hoosier farmers, all of them—to the beauty of modern architecture and to the convenience and healthfulness of indoor plumbing and central heating.

Eight classrooms for grades 1 to 8 flank a corridor that runs the full length of the building. A gymnasium-auditorium, 40 by 70 feet, is located at the head of the corridor and to the immediate left of the entrance. It is ideally suited for community gatherings because of its spaciousness and the stage provides for presentation of school or neighborhood plays.

To the right of this gymnasium and across the corridor is a fully equipped kitchen for domestic science classes or for the preparation and serving of refreshments for community affairs. This kitchen is equipped with a two-compartment

NORMAN J. RADDER

Plumbing and Heating Industries Bureau

sink and with hot and cold running water. There are batteries of sturdy steel wall and floor cabinets for the storage of dishes, utensils, silver and other equipment. The floor cabinets have heavy linoleum work tops to reduce noise to a minimum and linoleum underfoot adds to the effect.

But what of the classrooms? The first striking thing about them is that they contain no conventional windows. An abundance of daylight is admitted through structural glass brick walls. Classroom and corridor ceilings have been treated for sound.

Indirect no-glare electric lighting fixtures can be called into play on dark days. No need for any child to strain his eyes in these classrooms. Desks are placed to allow light to fall over the shoulders. Blackboards are within easy eye range of the desk farthest from them.

Great as are the structural contrasts between this modern school building and its crossroads progenitor, the contrast between their respective plumbing and heating equipment is even greater. On the one hand were trips "out back" and all that they connote, and trips to the pump for drinking water of sometimes doubtful quality, owing to the ever-present hazard of possible contamination from outdoor toilets. Drafty ventilation and spotty heating from an overworking or underworking heater also were the rule.

Showers to refresh young bodies after gymnasium classes or to supply bathing facilities for children whose homes lack plumbing.



On the other hand are indoor vitreous china plumbing of the latest, most sanitary design; plumbing connected to a modern sanitary sewerage system and adequate to meet peak burdens; running water for washing, bathing and drinking; filtered air; forced ventilation, and automatically controlled heating.

This school's heating plant is not in the basement but in the boiler room on the second floor. Placing it there reduced construction costs at no compromise with efficient operation. The fuel is oil; the heating medium, forced flow hot water.

Moreover, there is not one immense boiler but five smaller ones of the sustained heat type connected in a series. Each boiler is individually controlled by its own automatic instruments. In mild weather one or two of the boilers supply sufficient heat to satisfy the thermostats. In cold weather, all five may operate in unison. But as the required temperature is approached, the boilers cut out one by one. This spells economy

Drinking fountains are set low enough for even the first grade child. Note the shield on the bubbler that prevents the lips from contacting the stream jet.

of operation, for it is conceivable that there is less expense involved in the intermittent firing of a battery of automatically controlled heating units than in running one or two larger boilers full time with no controls other than manual. The sustained heat design of these boilers keeps Btu.'s inside for absorption by the heating medium and prevents waste heat from being taken up the flues.

Heat is distributed throughout the building by unit heaters hidden in the walls and faced by grilles. A blower forces the heated air gently



Urinal stalls in the boys' washroom are made of impervious vitreous china and are flushed automatically every few seconds. There are two light and airy washrooms of spacious proportions equipped with modern plumbing.

yet surely and evenly into the rooms at a point just below the ceiling.

A highly efficient ventilating system circulates washed filtered air summer and winter. According to the engineer, there can be no stratification of air, since fresh air enters at the top, the same port of entry as

heated air, with just enough velocity to ensure turbulence for thorough circulation. Foul air is drawn off diagonally opposite at a point just above floor level. Drafts are notably absent. Teachers are enthusiastic in their praise of the conditioned air.

Similarly, the teachers praise the

plumbing equipment for its completeness and its clean, sanitary whiteness. There are two washrooms, planned to be useful, beautiful, airy and spacious. In each are eight flush valve equipped siphon action closets in door-equipped compartments that ensure privacy. Seats are of the open-front type preferred by health authorities. Closets are made from glistening, impervious-to-stain-and-soil vitreous china.

Likewise the lavatories are of durable, easy-to-keep-clean vitreous china. There are two in each toilet room. Each lavatory has its own liquid soap dispenser. Each is equipped with sturdy chrome plated, anti-back siphonage self-closing faucets. They are self-closing, for wasted water, especially hot, runs up the overhead. Furthermore, unless faucets are fully closed, water forces itself between seats and disks, cutting them to the point at which replacement becomes necessary.

Whenever a plumbing fixture is called upon to serve year in and year out in a public, semipublic or institutional washroom, no wiser or more economical selection of material can be made than vitreous china. It is resistant to stains; it is extremely durable; it has what it takes to deliver the goods over a long pull at a minimum of upkeep; it always looks well, and a "swish and a promise" with sponge or rag cleans it.

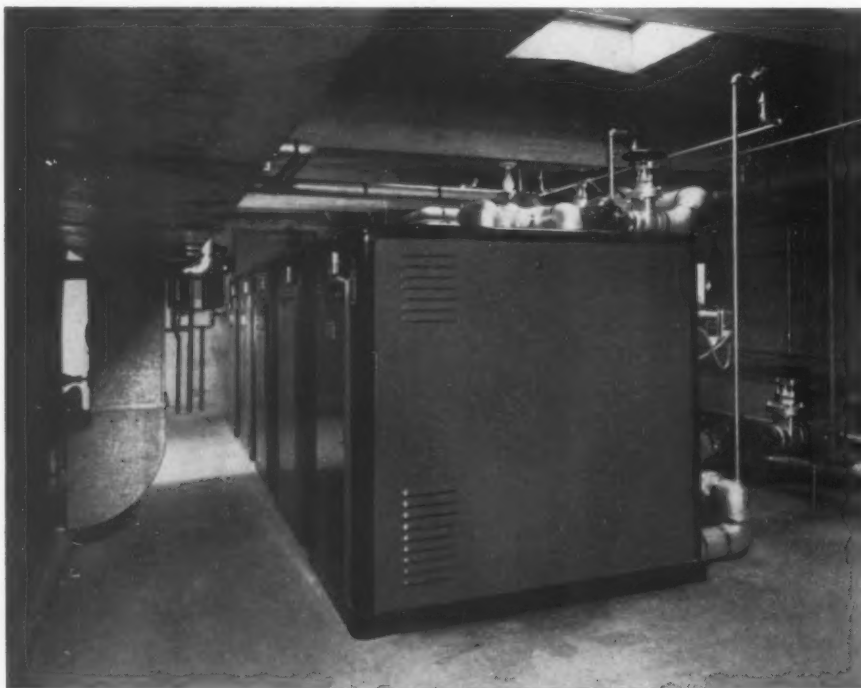
It might be well to say another word or two about faucets and drains. They, too, must "have what it takes." If they haven't, it means expense anyway you look at it. Which is the better procedure: save a few cents apiece on original cost and spend more than the difference in repairs and labor, or save dollars in the end by spending a few more cents in the beginning?

There are two shower compartments in each washroom. Remembering that country schools often serve communities in which the Saturday night bath is a washtub rite with water either too hot or too cold, these showers may serve a dual purpose.

Instead of having to run out to the pump (and thawing it in the winter time) to get a bucket of water, the pupils need only step to one of two drinking fountains.



Domestic science kitchen designed in the shape of an "L." The linoleum topped white enameled steel cabinets provide storage space for equipment.



Battery of five sustained heat oil burning boilers. Each has its own automatic electric instruments allowing it to operate individually as needed.



Riding the Ether Waves

IN THIS materialistic age, practicality is frequently the test of value. School boards and principals become enthusiastic about a subject or course, in ratio to its immediate utility. Pupils demand: "What good will it do us to learn this or that?"

Language teachers have hitherto answered in terms of cultural values. Nowadays, if they are alert to the recent developments in the radio field, they can answer the materialists with a twist of the dial that transports over the ether waves the Spanish or French or German tongues with which pupils are struggling. It can be pointed out to the high school pupil that if he masters another language, he can share the knowledge (and the business) of that nation.

Sixty thousand schools, according to recent estimates of the Department of Commerce, are equipped with radios. The networks' most popular educational features have a

WILLIS KNAPP JONES
Spanish Chairman, Miami University

weekly audience of ten million school children. It would seem logical to find teachers of modern languages making use of radio, but my experiences and questionnaires show that too few of them are aware of its possibilities.

Recently at Miami University the department of modern languages established a Listening Post to discover available foreign programs. During the first four days of operation, programs from 26 nations were heard, at least one in each continent. Since then, stations in 38 more nations have been logged.

The Listening Post helps pupils to learn languages the easy way.

True, many had programs in English, and some were too faint to be heard by any except an experienced listener. But, in spite of these difficulties, the "spiderweb" antenna on the roof of the university's oldest building picked up a ninety minute broadcast of Alarcón's *Sombrero de Tres Picos* to the delight of several Spanish classes. By use of an eight tube set, a conversation class eavesdropped on an amateur in Santo Domingo conversing with a Colombian friend, and a Peruvian *caballero* flirting with a *senorita* in Chile.

As for broadcasts in other languages, it is no trick at all to pick up Zeesen, Germany. DJQ broadcasts practically all morning, and then DJB and DJL continue until after school hours. France, too, is increasing its power and its time on the air. Pontoise TPA2 is on until 10 a.m. TPA3 offers programs for part of the afternoon. It is useless

to indicate radio schedules in an article when changes occur almost daily and when there are radio publications that keep listeners informed of program changes. Ten cents will buy a copy of Dx'ers Alliance's *Globe Circler*, published at Bloomington, Ill., which has up-to-the-minute reports on hundreds of stations all over the world.

Do you ask what it benefits to match a struggling beginner with natives speaking fluently and rapidly? We have watched beginning students at the Listening Post. First they have a blank look as the flood of words almost drowns them. Then as they struggle up for air, sooner or later a familiar word floats by, at which they clutch as if it were a lifesaver. It is not long before they can identify phrases and, with a little more practice, they begin to understand occasional sentences. Also, students may verify what has been told them about intonation and speed of pronunciation. First successes at comprehension increase in-

terest in the language and motivate intensive study. This, in turn, increases understanding of subsequent broadcasts; so the circle goes, to the gratification of the teacher.

At Miami we are not always successful in bringing in the stations we want, since conditions are not always right. But anyone who understands the science of radio will not expect miracles.

Possibly this uncertainty about reception has been the reason why more high school teachers have not put their language classes in contact with foreign countries via short-wave radio. But foreign stations have greatly increased in power and receiving sets are rapidly approaching a perfection that will make foreign broadcasts a regular part of all modern language teaching.

We who teach Spanish are particularly fortunate, since we have Cuban and Mexican long and short-wave stations audible in all parts of the United States. COCX and COCH in Cuba, for instance, broadcast

from 8 a.m. until midnight. XEXA, the station of the *Secretaría de Educación Pública* in Mexico, broadcasts during the afternoon school hours. The powerful Buenos Aires station LRU usually may be heard from 7 a.m. till 6 p.m.

The number of stations whose programs reach the United States is on the increase. Recently on a trip through South America I learned that a powerful Chilean station is to go on the air with an all-day program. Radio Tunari in Cochabamba is about to put Bolivia on the air with 1½ kw., and several Lima and Ica (Peru) stations are in regular communication with North America.

Here I stopped typing to see if old reliable PRADO in Riobamba, Ecuador, was on the air. It was. So was EAQ, Madrid, which with increased power is one of the loudest of European stations.

However, the ether is not only available to Spanish students. Station 2R04 in Rome provides interesting Italian lectures, news and music from 6:45 a.m. to 12:30 p.m., and then 2R03 carries on until 7 p.m.

French classes have, in addition to Parisian French, the bilingual stations at Quebec and Winnipeg. Verification cards to the Listening Post from Moscow and Tokio within the past few weeks promise language lessons in Russian and Japanese for radio listeners.

No matter what language is being studied, the teacher has only to hook up one of the splendid new receivers in order to ride the ether waves to a country in which that language is spoken.

There will be failures. Programs will sometimes wail like alley cats, but there will be successes, too; many of them. And when a broadcast comes in successfully, the educational advantages of listening to natives speaking and singing the language being studied will be great. The pride of recognition, even though the matter heard is only an advertisement for yeast or safety razors, inspires pupils.

Every program heard by classes in modern foreign languages will increase student interest in that foreign country, and foster the fellow feeling that all of us who teach languages are trying to instill.

"Stamp Tax" Activity Fee

HAROLD SPEARS

CENTRAL High School of Evansville, Ind., this year has inaugurated a "stamp tax" activities fee plan which is administered by a faculty member and three pupil assistants.

The stamp tax is merely a device for collecting the activities' fee through weekly installments. Homeroom treasurers sell a 10 cent stamp to each participant in the activity plan each week. A participant pays down 25 cents at the first of the year and through a homeroom treasurer buys a 10 cent stamp each week for thirty weeks.

Activity books are filed in the activity director's office by homerooms. The homeroom treasurer obtains his homeroom's books prior to each activity, clips the coupons bearing the number designated for that activity, delivers the coupons to the paid-up members and checks the books back into the director's office.

Each homeroom has a passbook

and uses deposit slips when turning in collections. Each ticket has a serial number and is signed by the purchaser. Accurate bookkeeping enables the director to trace the misuse of tickets.

The pupils pay \$3.25 for an activity program that would have cost \$7.65 under the former systems. When the budget was set up for the plan, the financial allotment of funds was based upon pupil participation in activities over a period of years. Two dividends have been paid and another is about to be made under this plan.

The plan has eliminated innumerable drives and ticket sales for funds and has meant less money out of the individual pupil's pocket and less teacher time in financing programs. The real educational value is the greater pupil participation in the life of the school. Ninety per cent of all pupils are attending all of these activities.

DECORATING and PAINTING



Gone are the days when the maintenance problem alone determines the choice of colors and materials for school interiors. Many new types of building and decorative materials can be obtained at a cost well within the school budget. It remains only to choose from among them a harmony of colors and, perhaps, a contrast of textures and patterns. The goal in planning or redecorating school interiors should be to keep the pupils inspired and alert, not tired and bored. To attain its aims, the school building must be a child's building. To disregard child psychology in design and decoration is to make an unwise investment. A good rule in decorating is to combine beauty and utility in about equal parts.



Color Comes to School

INITIAL contacts frequently produce impressions so lasting that they are often crystallized into opinions and strong attitudes. We like to visit a store that is clean, bright and cheerful. Somehow or other this positive impression carries over into our attitude toward the products sold. Attractive displays of goods or food products definitely affect the purchaser.

The school plant is an agency that not only contributes positively to the success of the instructional process but also plays a significant part in the interpretation of public education to parents of children and to the community as a whole. The building creates an atmosphere that affects the children and the adult visitor as well.

THE typical school plant is dingy, drab, dreary, dull and dismal, and its effect on child, teacher and parent is all too often distinctly depressing, instead of normally stimulating. Unsightly and poorly kept grounds create an initial feeling of careless housekeeping. The familiar odor that permeates the typical building, long since classified as "school smell," and the dingy corridors, dreary classrooms, ugly floors, factory bleakness, dirty toilets, and unsightly engine rooms combine to produce a negative impression. It is impossible for the visitor or occupant of these typical structures to radiate enthusiasm. Drab school plants lower teacher and child morale, and condition the effect of teaching. Teachers are forced to work harder in dismal surroundings to produce the same results.

The "practical" executive may say: "Bunk, that's just an emotional attitude!" Reply might be made that in all human relationships, including the complicated process of instruction, emotion plays an all-important part. It determines the feeling toward an object or an activity. It raises or lowers morale. The effect of bright, cheerful surroundings upon those using the environment is that of morale builder.

CONSIDER a superior present day school plant in which intelligent administration has recognized the value of certain environmental factors and made provision for them. The building is well placed on the site and the landscaping has been effectively done. The natural beauty of grass, flowers, shrubs and trees has been used to enhance the approach to the house of childhood and youth. The grounds are neatly kept, generally with the direct help of the children them-

selves. The door and window panes glisten and the vestibule is sweet smelling. The corridors are cheerful, not only because they are well-lighted but because of the thoughtful use of warm colors. Here is no feeling of walking through an institutional cave but rather a pleasureable approach to some significant architectural and decorative treatment of a special unit.

The walls frequently display either good pictures or murals, some of which may have been painted by the children themselves. Lockers are not an institutional gray, green or brown but are painted in gayer colors that harmonize effectively with the general scheme of decoration. Ceilings and floors are coved to prevent carbon collections in sharp corner angles. Even the floors have been designed to produce a stimulating effect instead of being considered purely as a means of pedicular transportation.

CLASSROOMS are alive with interest. Wall and ceiling colors have been selected for their psychological, as well as decorative, value. North rooms are bright with the yellow that suggests fields of jonquils or with shades of soft, warm reds; rooms to the south are cooled by restful blues and greens. Rooms with east and west exposures vary in tonal warmth in relation to their climatic position. Even the equipment has dropped its "academic browns" and sickening "goldens" and is finished, instead, to make a color symphony of the whole. Here and there are found experimental suggestions that black is no longer an essential color for writing board surfaces. Classrooms are individual and reflect their purpose.

Gymnasiums have been transformed from ugly, noisy rooms to places in which the wall treatment suggests its rugged use. Auditoriums have gathered about them something of the magic of the theater. Shops do not rudely attempt to reproduce the worst in obsolete factory structure but blend into the whole environment as they should if their democratic implications are thoroughly understood and appreciated. Homemaking suites reflect the atmosphere of the home of good taste. Libraries attract the children because they are pleasant places with an atmosphere that invites reading. Cafeterias are wonderfully aided by colorful hangings and attractive furniture. They invite the pupil to lunch. Even the boiler rooms glisten and smell of good clean paint just as they do on big ships and in modern factories.

The visitor states, as do children and teachers, "This is what an American school SHOULD BE!"



Color in Functional School Design

MARCELLA ORR-ROSA

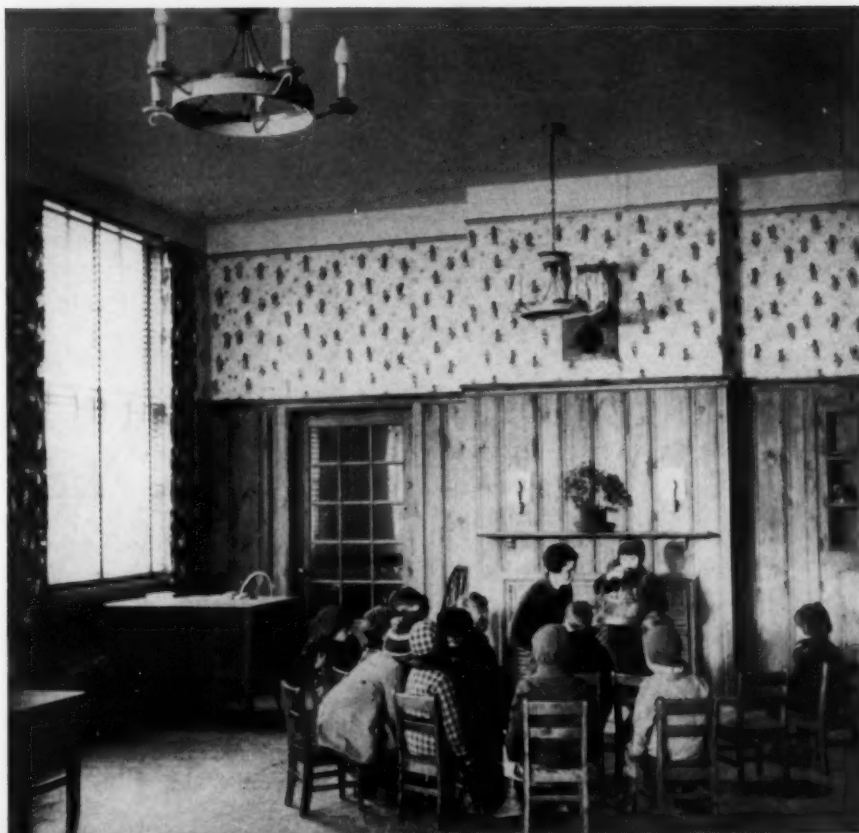
Interior Designer

Warren S. Holmes Company, Architects

IN THE past, color in the school has been limited to the use of paint. Decorative materials, such as marble, stained glass, bronze and gold leaf, have been out of the reach of the ordinary school budget.

Thus, when the necessity for re-decoration arose, it became the practice for schools to relinquish their color schemes to the maintenance staff, whose duty it was to eliminate the appearance of soiled walls as economically as possible.

With the comprehension of certain psychological truths regarding color



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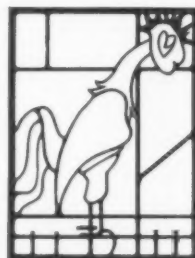
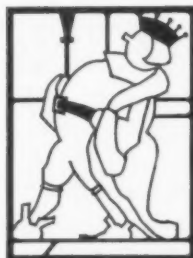
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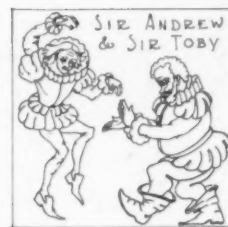


Tile inserts inspired by Mother Goose please younger children.

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Shakespeare characters make art details suitable for high school.

and the awareness of its esthetic and cultural values, it is now considered poor economy to disregard, for maintenance reasons, the significance of color as a valuable contribution to educational environment.

The color conscious public now demands beauty coupled with economy in modern products. Advances in industrial chemistry and physics and the resultant perfection of innumerable new materials make possible the use of color in modern school plants at a cost well within the appropriations usually available for them.

These new materials are being manufactured in a great variety of textures, dependent on their purpose and use, so that the effectiveness of school interiors can be enhanced by harmonies or contrasts of texture as well as of color. Modern materials have great decorative potentialities integrated with color. One material will combine with another for contrast or for harmony, or designs may be easily worked out in one material only in varying degrees.

In the kindergarten of the Thomas Street School, Lansing, Mich., color and texture are employed to create interest. The color scheme is a symphony of yellows in several values and intensities. There is a harmony of color, but a contrast of material and pattern between the smooth textured knotty pine wainscot and the horizontally laid planks of variegated widths of rough textured acoustical board* above it. The natural yellow-

*This term includes both acoustical and semiacoustical wallboard.

ness of the pine has been subdued with a bit of green aniline dye; the wallboard is of several shades of warm tan. This is a large, sunny room flooded with light from the windows and from a glass brick bay. Knowledge of color and texture has been applied to make the room appear smaller, more domestic in scale and in proportion to little people. The vertical boards of the wainscot tend to pull the walls in. The appearance of a low ceiling has been achieved by use of acoustical material in a plain pattern of large squares, the lightest color being repeated in the rough texture of the upper walls.

The decorative quality of acoustical materials lies primarily in the patterns in which they can be arranged, in their great range of textures, varying from smooth to very rough, and in the soft colors in which they are available. In the schools at St. Joseph and Negaunee, Mich., this type of material has been used only for the ceilings of classrooms in contrast to the plain painted plaster walls below.

Some manufacturers are now offering wallboard in two color effects; the surface of the board is of one color and the beveled edges are painted in a contrasting hue, offering new possibilities. Stenciled designs can be applied further to decorate this material.

At the Thomas Street School, interest in color and pattern has been added to the kindergarten scheme

through brightly lacquered plywood cutouts, repeating the colors of the window drapes, silhouetted against the textured wallboard. In the St. Joseph kindergarten, this interest is in the cleverly painted murals above the wood wainscot. Touches of bright colors, combined with large areas of neutral colors, lend vigor and character to a scheme and have proved highly successful in the classroom. In such a room, the pupil is inspired and alert, whereas in a room carried out in neutral colors alone he becomes tired or bored as the result of monotony.

A new field in decoration has been opened with the perfection of plywood. The pattern interest and subtle color of wood grain make it a rich material. As its general use is becoming more extensive, it is now available for school use. Our firm applies paint to it with success, giving rise to a new kind of mural decoration whereby the grained areas of the wood can be contrasted advantageously with the flat areas of the paint.

Linoleum is available in a wide range of colors, both for floors and walls, and the ease with which it can be cut makes it an admirable material for school use. All sorts of story-telling design inserts are made possible, adding variety and interest to a color scheme.

Effective use of linoleum is well illustrated in the Negaunee kindergarten where the simple lines of the room have been emphasized with a border of bright colored animal inserts contrasted with the light gray

marbleized field of the floor. The color scheme has been derived from the yellow, coral and gray of the window drapes. Light colored textured linoleum is much more appropriate for classroom use than dark plain linoleum, and the former is available at slight additional cost. It cannot be denied that the light colors are much more pleasing and the marbleized textures are practical as well, for they do not show the tracks that plain surfaces do.

Wallpaper is used advantageously by our firm above wainscots in kindergartens, workrooms, teachers' rest rooms and elsewhere out of reach of dirty little fingers. It lends a domestic atmosphere to the classroom and keeps pattern interest well up above the eye level, causing no unnecessary distraction.

Green or brown blackboard has been used in many schools. Its reception has been such that manufacturers are experimenting with new colors and our company expects to install gray-blue and maroon blackboards in its next school building.

Cork carpet is available in soft gray-green and tan. It has been used as a decorative as well as practical material for tacking space above blackboards.

Drapes of smooth or textured fabric with an interesting printed pattern or weave are an inspiration for new color schemes in old and new classrooms alike. When the budget cannot be stretched to provide new furniture throughout for a new school building, old furniture can be

painted in a soft color found in the pattern of the drapes, making a delightful room.

There are glass block, asphalt and rubber tile and other materials the texture and color properties of which cannot be discussed here in detail. Let it suffice to underscore the value of the new floor coverings. They are colorful and sanitary and help to solve many maintenance problems.

With such an array of color and texture in materials, the possibilities for school interior treatment are almost boundless. With a knowledge of the principles of design and with a discriminate use of color, it is possible to work out, economically, a variety of purposeful schemes.

Neither the school architect nor the educator can well afford to neglect the part color plays in the environment of the school. It can be a deterrent or a motivating force in education, for it is a visual stimulant influencing interest and attitudes. It can make a child receptive or unresponsive. Intelligent use of color is necessary to help the child from becoming bored in a room in which there are large areas of one color or from becoming distracted in a room in which too pronounced a pattern is used. The child gains culturally by exposure to colorful surroundings. He enjoys color and learns to use it discriminately. He transmits it to his home environment and puts it to practical and esthetic uses.

This is a truth evidenced in the library and art room of the Benja-

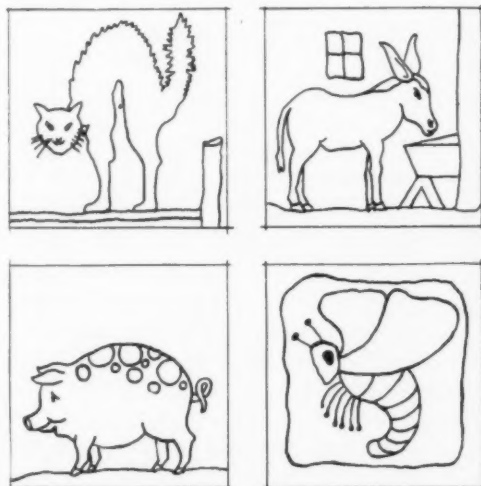
min Franklin School at New Britain, Conn. The color schemes and functional room planning have been designed to serve as background and inspiration for the pupils' art expression.

In the areas above blackboards and bookcases, the pupils have painted murals of characters appealing to their imagination and corresponding to their intellectual levels. A procession of colorfully clad oriental figures has taken its place above the library bookshelves; a mural depicting fish and undersea life is a part of the art room, where already a third mural, telling the story of "Alice in Wonderland," is being designed for a classroom to replace a story that has served its purpose.

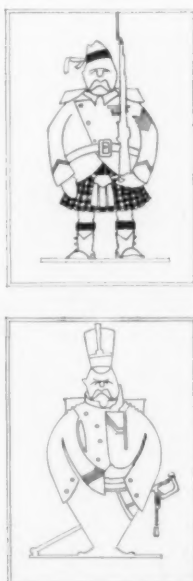
The influence of inspiring backgrounds is apparent in classrooms in which picture or poster exhibits are arranged on the bulletin boards or on the wall area above them. These exhibits are being continually altered.

Workable color schemes result from knowledge, experience and inspiration, and a philosophy of color must be evolved in planning functional rooms for schools. One that has worked successfully for the Warren S. Holmes Company revolves around the idea that the pupils should be put gradually into a receptive mood for classroom work. Coming into the building from the playground where they have been laughing and running, they eventually find themselves in the classroom where they must be in a mood for the mental variety of gymnastics.

Designs for colored tiles for kindergarten and first grade use.

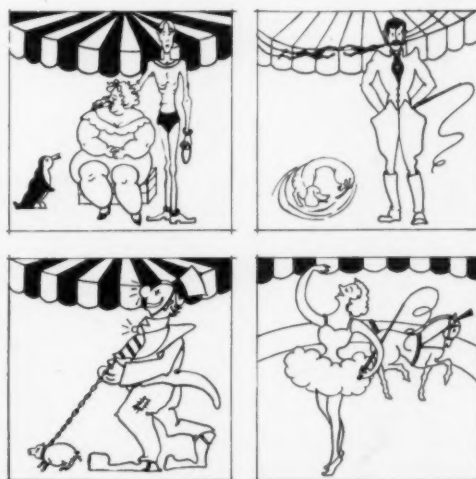


TOUCH OF HUMOR IN



LINOLEUM INSERTS

Circus scenes have equal appeal to grade and high school pupils.



Therefore, the entrance vestibule and foyer should be lively so that their entrance into the building is pleasant and cheerful and not disheartening and austere. In the foyer, colorful materials and a variety of textures are employed, such as a rich wood wainscot, walls painted in a soft, neutral color with universal, rather than individual appeal. Certain shades of yellow or green are preferred, since this room is designed to appeal to all who enter.

The foyer of the St. Joseph school is a good example. There are an inspiring inscription and exhibit cases in which the children's work is on display. This is a room that turns



Two colorful foyers in Michigan schools as planned by the Warren S. Holmes Company. Note in the top picture the subtle shadows cast by fluted cornice. Below: Mural designed by pupils in library of grade school in New Britain, Conn.



the shouts of the out-of-doors into gay, friendly chatter, a meeting place of varied interests.

Throughout the building, carefully designed tile inserts, tinted glass panels, linoleum cutouts and stenciled silhouettes, depicting subject matter of interest to the child, are incorporated in the design and color scheme wherever a logical place for their use is found.

Corridors and stairs continue the general scheme of the foyer but are quieter in color and interest, the latter evidenced only in gay, well-spaced inserts of the mottled textured wainscot tile. As they walk down the corridors, the children's chatter dissolves into a murmur. The classrooms themselves are restful, the colors of window drapes, walls, ceilings and floors harmonizing.

A touch of some bright color is introduced by means of a strip in the linoleum floor, a bright picture mold or in some decorative detail that lends character and interest to the scheme.

In this manner the functional classroom, provided with the necessary built-in equipment for facilitating work, a good color scheme and interesting decorative details, serves as a background for the teacher and pupil, inspiring them to put the room into active use with their own ideas and to make it complete.

Beauty Within

JANE REHNSTRAND

State Teachers College, Superior, Wis.

THE creation of a beautiful schoolroom is essentially an art problem. The problem is to change an ugly, often poorly lighted, cheerless room, with its poorly spaced wall, unattractive golden oak furniture and uninteresting pictures, into a place with a cheerful, colorful and happy atmosphere.

Color can do more to accomplish this than any one other element and since walls and ceilings can always be painted or calcimined, so it is well to start with large spaces. Walls and ceilings should be warm and light in color: yellows, oranges and warm greens in different values and intensities. The ceiling need not be the usual cream but may have a decided glow of yellow, yellow-orange or green that will reflect color into the whole room. Use a light orange-yellow, with yellow-orange for the side wall; or a yellow-green ceiling with orange-yellow side walls and darker orange-yellow below the blackboard. The choice for side walls is not great, but fairly bright colors may be used above the baseboard and up to the blackboard ledge. There are numerous hues, values and intensities of the warm colors named but care must be exercised in selecting suitable ones. This is an individual problem and no prescribed formula can be used.

Window Treatment Important

Window treatment is of greatest importance. First, the shades should be light and colorful (there are many artistic ones on the market), unless there is too much light, which is rarely the case. Draperies or curtains soften the hard lines of the woodwork. Right colors and patterns will transform a barren cold room into a warm inviting atmosphere. Again, the warm yellows, oranges and greens are best. Materials should be easily

Walls, ceiling, floor covering, draperies, bulletin board and furniture are thought out in terms of a pleasing color harmony in this elementary school designed by Warren S. Holmes.

laundered, unpatterned and of firm texture. All curtains should be hung taut, using two curtain rods for each window. They may be full length, one-half or one-fourth of the window length. A plain, colorless schoolroom may become a thing of great beauty by the addition of low light-green theatrical gauze curtains. With these curtains, there may be a ceiling of light yellow-green, and side walls of yellow, tinted with green. The bulletin board of grayed blue-green, flower pots of medium blue-green or other small color notes of bright yellow for repetition unify the room.

Another effective method of getting color into a room is by painting the window casings in bright colors such as yellow and orange. This gives a glow of sunshine even on dull days.

The use of colored glass has revolutionized interior color schemes during the last few years. Yellow glass used in a dark hall will give the appearance of perpetual sunshine. There are also many effective uses of

light orange, blue and green glass for schoolroom windows. Stained glass windows simply designed, in which color is used with restraint, have possibilities.

Windows should not be cluttered with plants, crêpe paper or other distracting window decorations, as these ruin the unity of the room.

It is more difficult to change the woodwork and furniture, so color schemes should be planned carefully. If the curtains and walls are colorful, the furniture may be grayed greens, grayed blues, grays and browns; but brightly colored table tops, bookcases, files, bulletin boards, chairs and doors, repeating and intensifying wall colors, may transform the room.

Suggested Color Schemes

1. Walls, light orange-yellow; ceiling, lighter yellow-orange; curtains, deep grayed yellow-orange; furniture, golden oak; picture frames, soft orange; screen, bright orange with dark trim; flower pots, deep cream. This scheme was used in a room in



which French classes were taught. The pictures are three large French railroad posters framed gayly in bright orange and black. Plants, bookcases and a few pieces of sculpture combine to make this college classroom a place the students will never forget.

2. Yellow ceiling; light, grayed blue-violet for side walls; bright yellow curtains; golden oak woodwork. A large mural painted in bright colors of blues, green-blues, orange and brown.

3. Light green ceiling; yellow side walls; blue-green furniture; accessories, orange, bright blue and yellow; curtains, blue-green.

4. Yellow ceiling, green side walls; blue-green curtains; furniture, deep violet-blue. (Avoid using red as it does not harmonize with other colors easily.)

Numerous other combinations, depending on the use of the room, light exposure and furniture, may be created with the help of the art teacher or supervisor and an interior deco-

urator. Children should participate in planning and executing the color schemes for their classrooms. They enjoy this kind of art lesson and its benefits are great.

Color sketches showing decorative possibilities will convince the authorities and help the painter in obtaining the desired results.

Other ways of bringing color and personality into the classroom are: a large mural map in bright colors for the front wall; beautiful globes; mural paintings done on heavy cardboard and framed with a simple molding; gay wall hangings of cloth, wallpaper or wrapping paper; simple modern bookcases painted in bright colors and decorated with gay pottery; a bulletin board decorated with a medium color for a background and a bright border or heading, and colorful railroad posters, framed simply, which are more effective as a decoration than brown and tan masterpieces. Glass door panels may be covered with an attractive wallpaper, cloth or even colored wrapping paper

to harmonize with the room. Colored glass vases and bottles placed on a small shelf in the window and filled with graceful flowers or grasses may help to make a beautiful color scheme. Brightly colored borders with unified designs and appropriate subject matter placed above the blackboard may supply a keynote of color to a dull room.

Flower arrangements created by the children and placed appropriately on tables and bookcases give a home-like appearance. Each classroom should have at least one beauty corner in which there are collections of shells, toys, stationery, pottery and colored leaves. They may be brought in by parents, teachers and pupils, and grouped into a pictorial composition by the classes. One such beautiful color arrangement, even though small, will do much to revolutionize the atmosphere of a drab classroom.

The following art principles applied to interior decoration will be helpful. Walls, doors and window frames should be painted to produce a feeling of unity of space. Woodwork and window frames contrasting too strongly with walls are to be avoided. The furniture should follow the construction lines of the room. Therefore, desks that are turned at an angle are not well designed and are permissible only as it improves the light for the pupils. The informality produced is forced and inharmonious and adds to the distraction of the room.

Avoid too many things; a cluttered room is disturbing. Choose simple modern furniture for use. Have a dominant color. (This is the first requisite of any good color scheme.) Hang pictures low enough so children can see them easily. Large ones should be centered in the wall spaces and small ones should be grouped about a piece of furniture. Use two parallel picture wires hung straight from the molding rather than picture nails.

The biggest problem of the art educator is to awaken teachers, principals and school board members to a realization that a pleasing environment is essential, if we are to practice the new philosophy of education, that "art is an inseparable aspect of normal living for every person."



Those attending the A.A.S.A. convention will be invited to visit the Shaw High School, East Cleveland. The typing room, shown here, has a flat white ceiling, blue-green sidewalls and 30 foot candles of light from six 750 watt silvered bowl lamps in indirect luminaires. Other combinations of color and lighting are expected to delight the visitors. Combinations of grays, greens and blues predominate in the classroom, while buff, aluminum, yellow and peach appear in other areas at this "exhibit" school.

Where there is plenty of light, there is no reason why simple window draperies cannot be used in the classrooms. They give the room both charm and color. For special classrooms, such as English or French rooms, patterns and colors characteristic of France or England add interest to teaching.

TO COMPLEMENT the use of color and harmonious furnishings in the schoolroom, contributing to a cultural background, there is no reason why simple drapes cannot be used in various rooms, even classrooms, provided they do not interfere with the light from the windows.

Drapes may be a source of color and may add to the charm of a room as well. It is possible to have draperies that serve a real function in teaching. For instance, colors and patterns that express the character of France or England add interest to French and English classes. The pupils may select the material and designs and make the draperies themselves. A Latin teacher selected colors and patterns for a Latin classroom that might well have been used in a Roman house. He claims that they added to the interest of the class.

The materials used for classroom drapes may be any sort of serviceable material but it is not wise to buy expensive material. The hardware may be purchased at any dealer's and the job of installing the drapes may be done by pupils.

Auditorium drapes should be in soft colors and care should be used to select colors that are pleasing to the eye and in harmony with the rest of the room. If wall decoration is used, it should be a neutral color to blend with the complete drapery. Simplicity should be followed, if success is to be assured.

Draw curtains serve two functions: (1) they close off the stage from the rest of the room, and (2) they frame the stage when opened. Therefore, it is simple to realize that the drapes must not detract from the action on the stage or clash with the color scheme of the room. Draw curtains usually consist of two side curtains



Windows at Their Best

IRA H. DAVEY
Architect, New York City

that close in the center and a valance that forms a border at the top. The valance is stationary, while the draw curtains run on steel tracks, lined with wood to deaden sound. Wooden tracks tend to warp. Draw curtains, in order to close properly and to give an effect of fullness, should be one and one-half times the width of the stage.

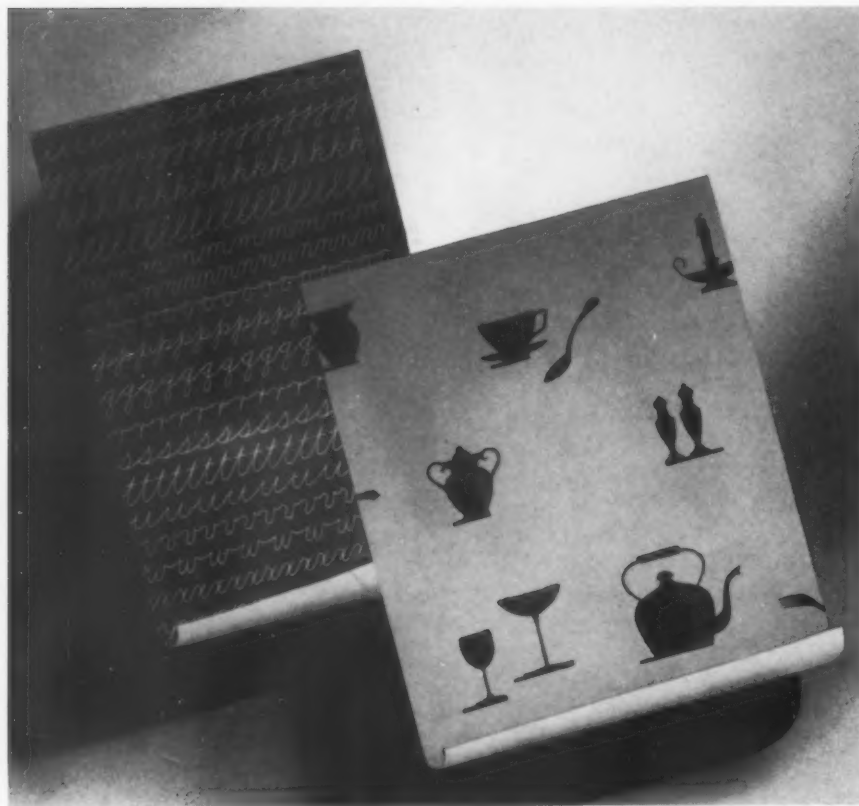
Velours is the most serviceable material for draw curtains. The cost is reasonable and it can be made nearly sunfast for ordinary use. There are, of course, many grades of velours, which are determined by the count of the cloth. The closer the weave, the better the material and the more it costs.

An auditorium must be guarded against the possibility of a fire that starts on the stage spreading to the main room. For this reason, the back of the draw curtains must be made flameproof. The curtains should be

lined with a material, preferably heavy denim, similar in color to the curtains and treated with a solution consisting of ammonium sulphate and ammonium phosphate and other materials. (The exact formula may be obtained from the U. S. Bureau of Standards.)

The cyclorama, or curtains around the stage, should be neutral in color and made of an inexpensive cotton material, preferably rep. These curtains form a background for action on the stage and should be adjustable. They should be hung from pipes rather than from wood battens. The cyclorama is held in place by chains sewed in a continuous canvas pocket several inches above the bottom hem. This method keeps the drapes hanging taut without dragging on the stage floor.

The window drapes of the auditorium or assembly room should be
(Continued on page 44)



Wallpaper has "unrolled" in school for, being washable and sunfast, it has become practical for such use. At the left are two new papers: one, white penmanship on a brown background; the other, a kitchen design for the homemaking department. The penmanship paper carries as pattern and not as alphabet exercises.

In most wallpapers pure colors are blended with black, white or some contrasting color to produce subtle shades that give harmony to a room without dominating it. There are far fewer "must not" regulations in regard to colors for wallpapers nowadays than there were a few years back. The range and scope of colors are wider; the use of them is bolder. While soft colors are used, they are not so pale or so neutral in pattern that they are insipid. And more and more wallpapers with dark backgrounds—wine reds, rich gray-blues, browns, even blacks—are in demand. These are particularly good for giving an atmosphere of intimacy and warmth to a small room.

Comparatively little is known about the psychologic influence of pattern, although a few steps have been taken in that direction. For instance, the doctor in one psychiatric hospital recommends the use of jagged, angular wallpaper for certain patients, on the theory that such designs give a sensory outlet for upset nerves. Similarly, it may easily be proved some day that a small intricate pattern will prepare a pupil for multiplication tables or that a

Walls Tell a Story

LOUISE McKOWN

Interior Decorator

IN STEP with the widespread modernization of school buildings and the increasing importance attached to correct environments for children, wall decoration is coming rapidly to the fore. The scope of colors and patterns in wallpapers on the market today includes thousands of designs suited to every need and every mood. For kindergartens, cafeterias, libraries, teachers' rest-rooms, halls, homemaking apartments and classrooms (above blackboards), wallpapers supply ornamental effect and friendly atmosphere.

One reason for their widespread acceptance in schools is the technical improvement in these papers. Today they are serviceable, washable and sunfast. A simple lacquer spraying process adds durability where it is needed. Wallpapered walls can be cleaned easily by the use of a soft cloth with soap and water. More-

over, repapering causes practically no disruption to normal routine, a distinct advantage.

In the selection of papers, of course, the choice of color is important. The age group, the type of activity carried on, the location, size and lighting of the room are to be considered, as should the psychologic effect of colors. For instance, the first color that children notice is red. Because it is so noticeable, it also is irritating when dispensed in too generous quantities. In a kindergarten, a bright red motif in the wallpaper is cheerful and pleasant. For older children, it might prove distracting.

The same observation is true in a lesser degree of the other pure tones, yellow, green and blue. While these colors in sharp contrast might be fine for a recreation room, they would not be conducive to study or concentration.



certain type of stripe aids his imagination in the composition of English themes. At present, it is safest to choose patterns according to suitability of subject matter.

The kindergarten is the first room to be papered in many schools. Papers for small children are amusing, whimsical and varied. One shows little lambs leaping over a fence. One has stiff black French poodles on a reddish background. A favorite for this year, called "Good Luck Elephant," shows a mother elephant with two small ones, red on a gray background. "Noah's Ark" has a select group of the animals that were present in that famous excursion. "*Joyeux Marins*" has three toy soldiers dressed in red and blue. "Once Upon a Time" is a silhouette paper, red on white, and has Indians, the Pied Piper and a little boy and girl.

Other novelty papers are suitable for the kitchen in the homemaking apartment or the home economics department. Fanciful kitchen papers have for the last several years been used to offset the laboratory effect of the modern efficient kitchen. One

such paper shows knives and forks and spoons arranged in precise rows. A paper named "Market" has a profusion of vegetables; another shows cherries and strawberries interlaced. A particularly fantastic paper has a triple motif, a lamb, a lobster, a rooster all stepping into their respective frying pans, which are manned by miniature cooks holding huge salt and pepper shakers. This one comes in green with yellow and orange figures, or in cream with red figures.

Another section of the school where wallpaper has been welcomed is in the cafeteria. Full length scenic papers are good here, at least on one or two sides of the room. Scenic papers give a strong illusion of out of doors and they are especially recommended for basement cafeterias which otherwise might be dreary and cold. One called "Early America" shows a coast town toward the end of the eighteenth century, with the sea and sailing vessels in the distance. Others have tropical or rural backgrounds.

In this connection, wallpaper is well used to cover the screens or



movable partitions that are sometimes set up to give pupils privacy for group or club meetings in the cafeterias. If screens are built in the manual training quarters, they can be papered there also, in colors and patterns harmonious to the room. Good papers for this purpose have designs of trailing vines or morning glories that suggest an arbor, while ships also are popular. One suggestion for achieving unity, if partitions are papered differently, would be to have all the papers harmonize with the ceiling, which might be papered in some pastel tint of blue or green or yellow.

Florals for the teachers' restrooms are a popular choice. Floral papers have changed during the last few years. Today they generally have clear colored backgrounds, the flowers are large and there is plenty of space between the motifs. Inspirations for these designs come from daisies, dogwood, water lilies, wild roses, pansies, apple blossoms and many other flowers. Banana trees, ferns and bamboo trees, likewise, are the subjects of some beautiful papers. All these are effective in contrast with the smooth surfaces and simple lines of modern or office



Left: Two patterns suitable for use in the kindergarten or first grade. They are "Wynken, Blynken and Nod" and "Once Upon a Time." Above: Colonial and other historical papers are obvious choices for history classrooms. Left, opposite page: Florals are always popular for teachers' restrooms, because they are soothing.

Reflection Values of Paint Colors

<i>Tint</i>	<i>Per Cent</i>
White	89
Ivory	82
Canary yellow	77
Cream	77
Caen stone	76
Orchid	67
Cream gray	66
Ivory tan	66
Sky blue	65
Buff	63
Pale green	59
Shell pink	55
Bright sage	52
Silver gray	46
Olive tan	43
Forest green	22
Coconut brown	16
Black	2

furniture. For a more severe effect, a plain striped paper is appropriate.

Libraries are made for books, and books in themselves are a strongly decorative factor. However, if the bookshelves do not go to the ceiling there is a place for wallpaper, and the use of it definitely contributes to a hospitable atmosphere. Wallpaper here should be in soft colors; a reproduction of some early Colonial pattern does very well. An example is "Colonial Tavern," a repeat scenic showing an old inn, with cows, horses, children and a winding road in the background, which is a reproduction of a paper more than a hundred years old. Another old one is called "The Hunt" and has horses, hunter and hounds in leafy medallions.

A wide range of papers is suitable for halls and stairways. A paper in Chinoiserie designs (with pagodas and flowered trees and mandarins) does much to offset the traditional monotony of the halls. Wide stripes in shades of green or blue are stately; scenic papers are cheering.

Finally, there comes the subject of the classrooms themselves. Obviously the wall treatment must not interfere with the blackboards; it should be limited to the space above the boards and to the ceiling. A parochial

school in Long Island has papered all of its classrooms in this fashion successfully. Beginning with a fairy tale paper for the kindergarten, animals for the first grade, ships for the second, it has story telling scenics for those a little older and subdued plaids for the most advanced pupils.

Another approach to the selection of classroom papers is to choose one that suggests the subjects taught there. Thus, in a geography classroom there might be a paper inspired by a foreign country, such as the Mexican paper "Fiesta" which has peons in sombreros, with ox carts and cactus plants; or a paper that gives an accurate portrayal of a Scottish countryside.

For atmosphere in English classrooms, there are papers along the lines of one which shows characters from Dickens' novels, all carefully labeled and easily recognizable, while for the mathematics classroom, a simple geometric design might best suit the work. Here, too, a ceiling paper, showing stars and constellations or

an interesting novelty pattern repeating the signs of the zodiac will suggest the boundless scope of the mathematician's field. Colonial and other historical papers are obvious choices for the history classroom.

For a room where current events is taught, there might be a more modern note. One paper, "Progress," shows an outline map of the world, in reddish brown, and on it are indicated radio stations, steamships, airplanes and oil wells. On another are sketched the buildings in New York's Radio City, combined with the George Washington Bridge, a streamlined train and the now famous trylon and perisphere. Thus, wallpapers keep pace with the tempo of the times.

But these are only suggestions, and the decorator for each school can solve his own problems best. The requirement remains, however, that the modern, efficient school must be at the same time more homelike and friendly than at any time in the past.

Windows at Their Best

(Continued from page 41)

carefully worked out to harmonize with the stage curtains. However, velours is not very satisfactory for this use, as it is almost impossible to keep it from fading in the sun. For this reason, it is advisable to use damask or homespun. These curtains may be made lightproof by sewing a piece of black flannel between the front and back of the curtains. The material best suited for backing the curtains is gabardine twill, vat-dyed and sanforized to reduce shrinkage.

One point in passing that might be of interest is the fact that the window sills should be several inches higher than the bottom of the curtains to keep light from seeping through the bottom of the drapes.

To decorate an auditorium properly requires the advice of authorities in this field. Most of the stage drapery companies give this advice willingly.

For the kindergarten special care in the selection of drapes and the patterns on them is required. All

material companies have a stock of kindergarten prints, if one wishes this type of material. However, it is a question whether or not these pictures are the proper means of decorating kindergarten curtains. More and more, architects are being told to leave out this type of decoration in the kindergarten. Except to say that the material should be serviceable and easily washed, we leave the choice of pattern entirely to the kindergarten experts who are up on the latest theories.

Teachers' rooms and offices should have neutral drapes of sunfast material. The recommendation of those who know is a mohair fabric. This material is made of wool, it has strong fibers and cleans well.

Drapes can add to the charm of a poor room or take away the charm of a pleasing room. Here is a matter for real judgment and a test of good taste. It is well to remember that everyone's taste is different and in no place do tastes differ as much as in choosing drapes for the school.

Cleaning Painted Surfaces

K. P. GRABARKIEWICZ

Assistant Superintendent of Operations
Teachers College, Columbia University

MANY painted surfaces that look fairly clean are often found to be soiled more than it first appeared. A good way to find out if a painted surface needs washing is to clean an inconspicuous spot on the surface.

Quality paints may be washed many times before they need repainting, provided the methods and materials used are suited to the work to be done and do not scratch or discolor the cleaned area. Painted surfaces washed by trained employees with carefully selected cleaning agents will stay clean for a long time because they are free from substance that will attract or hold dust and soil.

Ordinary dirt can be removed if a film of liquid can be forced between it and the fabric or other material. Obviously the ability of the solution readily to wet the material to be cleaned and the foreign matter upon it is of major importance. Drops of pure water, when free, assume a spherical shape and are slowly absorbed by fabric. The surface of the water acts as if it consisted of extremely thin elastic skin. The force that causes a volume of liquid to take form on the least surface area is known as surface tension. Solutions of low surface tension will wet the surfaces with which they come in contact more readily than will solutions of high surface tension. Soap is one of the most effective agents for lowering the surface tension of water and increasing the wetting power of the solution.

Upon adding soap, soap solutions or alkalis to hard water, the calcium magnesium, iron or other elements that cause hardness in the water react through the soap to form other insoluble soaps. The use of hard water not only wastes soap but in many cases may cause poor cleaning action because of the deposits that insoluble soaps leave on the materials or surfaces to be cleaned. Soft water is simply water that is free from substances that produce insoluble soap compounds, and water soften-



Observe the wall washer on a folding scaffold with sponge and two pails but minus long rubber gloves and a drop cloth.

ing consists of removing these particles from the water, usually as finely divided insoluble compounds.

The process of washing painted surfaces consists mainly of the three following stages: (1) wetting the surface to be cleaned and the dirt; (2) removing the dirt from contact with the surface, and (3) retaining the removed dirt in suspension in the solution and preventing it from re-depositing.

When cleaning rough surfaces it is recommended that a large wool sponge be used for the application and removal of the solution. The sponge should be applied to the surface with a circular motion, describing small circles, the center of the sponge being moved about an inch at a time. This can probably be described as a sort of rolling action. If the sponge is used on a rough surface in the usual scrubbing manner, it will last only a short time.

The supervisor of an extensive paint washing job should determine the amount of cleaning agent to be added to the water. Water should be warm but not hot, as it is only for the comfort of the user that the water is warmed; 65° F. is usually sufficient. The cleaning preparation should not foam or lather when applied to the surface.

When the correct strength of cleaning solution has been determined, a large quantity may be mixed in order to ensure uniform strength for the area to be cleaned.

The walls having an outside exposure are much harder to clean than the inside walls, and the ceiling under an attic does not clean as easily as the ceiling under a floor.

The following procedure has been found to be satisfactory in washing walls and ceilings:

Each washer should be provided with two pails and two sponges. One pail should contain the cleaning solution and the other, clear water. The pail with the cleaning solution should carry some mark of identification, as this material should not be used for rinsing. A sponge should

be placed in each pail. A drop cloth should be placed on the floor along the wall that is to be cleaned, and the operation should be started from the bottom, working up the walls toward the ceiling.

In the operation the washer should take the sponge from the pail containing the cleaning solution, squeeze it out to prevent dripping, and then apply it to the wall, using a circular motion, as heretofore explained, going over a part of the wall about 24 inches square.

As soon as the dirt starts to loosen, this sponge should be returned to the pail containing the cleaning solution. The other sponge should then be taken from the pail containing clear water and, after squeezing it to prevent dripping, applied to the same part of the wall that was previously treated with the cleaning solution, using the same circular motion. This sponge should then be rinsed in clear water and squeezed as dry as possible. All loose dirt should be picked up and the surface rinsed well. The rinsing water must be changed frequently. The last step in the operation is to wipe the part of the wall that has been cleaned, as dry as possible, using the last sponge.

Start Washing Near Floor

When cleaning the next portion of the wall it is necessary to lap over into the cleaned area far enough to prevent border marks. The object of starting at the floor with the wall washing procedure and working toward the ceiling is to prevent streaking. If the washing process is started at the ceiling and a small portion of the cleaning mixture runs down over the dirty part of the wall, it leaves a streak that is almost impossible to remove. On the other hand, if a small portion of cleaning mixture runs over the cleaned wall, it is easy to pick up and it will not leave a visible streak. A trained washer will drop little water.

It is generally advisable to have the washers use rubber gloves with a full length cuff when they are washing ceilings. The cuff may be turned toward the fingers and when water runs down the glove it will be caught in the cuffs. When the operator returns the hands to the pail to rinse

the sponge, the water will run out of the cuff into the pail. This procedure prevents the disagreeable sensation of liquid running down the washer's arm. (It is highly important that the rinse water be changed frequently.) The cleaning solution should not be changed except to obtain the right strength for the next job or section.

The air condition of the room determines the size of the section of the surface that can be cleaned conveniently at one time. The cleaning solution should not be allowed to become dry on the wall or ceiling. Hence the necessity for thorough rinsing. In some instances, full strength cleaning solutions may be used without damaging the paint. This is strictly a question that must be left to the judgment of the foreman or the person doing the work.

Some walls and ceilings cannot be cleaned by washing. This may be due to the inferior quality of paint that was used originally or to dirt having worked into the paint before it had time to dry. On plastered surfaces that are subjected to almost continuous sunshine, the dirt is baked into the paint. Under such circumstances, the surfaces are difficult, if not impossible, to clean.

The grade of paint that is used on the walls and ceilings assumes an important part in the cleaning process. If a thin paint has been used that does not seal the plastic finish, great care must be observed to prevent the dirt that is loosened by the cleaning mixture from being drawn into the plaster, as dry and porous wall plaster has a great affinity for water. If this occurs, it is almost impossible to remove the dirt by a further cleaning process. To reduce this absorbing action to a minimum, as little water as possible should be used in the washing operation. Walls and ceiling that have been painted with a sufficient number of coats of a good grade of paint can be washed a number of times. This usually is a satisfactory situation, as washing is cheaper than painting.

If there is a large area of walls and ceilings to be washed, it is generally advisable to build a folding scaffold for the convenience and safety of the workmen. A folding scaffold is easy to transport from

one room to another. This scaffold should be equipped with adjustable legs, which makes it possible to raise or lower it according to the height of the ceiling. It also may be equipped with casters of a sufficient size to permit it to be moved easily from place to place without marring the floor. The braces and cross members should be high enough to clear the pupils' desks. This type can be moved from one part of the room to another without dismantling. The platform should be about 10 by 16 feet.

When the work is completed in a room, it is necessary only to remove the drop cloth and the planks that comprise the floor of the scaffold. The scaffold can then be folded to a width that will permit it to be moved through the door.

A special scaffold should be provided for washing walls in auditoriums and gymnasiums where the ceilings are extremely high. If the scaffold is loose and flimsy, the washers perform their work under a mental handicap.

The height of the scaffold should be determined by the height of the men doing the washing. The top of a washer's head should be about 6 inches from the ceiling when washing this part of the room. A greater distance than this will cause the washers to stretch and they tire rapidly. A shorter distance requires the washers to crouch, which prevents them from seeing clearly what they are doing and also is tiring. It is most convenient to have washers of a uniform height for scaffold work.

May Wax Painted Surfaces

In many instances, wax will give a satisfactory finish for painted surfaces. The wax should be applied in a thin even coat and should be well rubbed in. It should then be polished with a soft cloth or lamb's wool polishing pad. The polishing of wax always improves the wearing qualities.

The advantage of using wax on painted surfaces is that it will greatly lengthen the life of the paint. In many cases it is necessary only to wipe the soiled surfaces with a dry soft cloth to remove daily accumulations of dirt.



Nationality programs are Cleveland's contribution to breaking down racial prejudices. At the left, pupils of Hazeldell School are doing the Irish lilt. Packed houses attend Polish Night and Bohemian Night performances at junior and senior high schools.

A.A.S.A. Goes to Cleveland

February 25 to March 2

Convention Theme: "The Foundations of American Education."

THE tentative general sessions program for the sixty-ninth annual convention of the American Association of School Administrators, Cleveland, February 25 to March 2, is as follows:

Saturday, February 25

All Day—Registration and exhibits in the Cleveland Public Auditorium.

2:00 p.m.—Joint conference on teacher education.

7:00 p.m.—"Americans at Work," C.B.S. broadcast (open to visitors).

8:00 p.m.—National Society for the Study of Education.

Sunday, February 26, 3:30 p. m.

Presiding: John A. Sexson, Pasadena, Calif., president of the A.A.S.A.

Organ: Vincent H. Percy.

Singers Club of Cleveland: Boris Goldovsky, conductor; Alfred R. Willard, assistant conductor.

In Memoriam: Conducted by E. C. Fisher, Peoria, Ill.

Invocation: Rev. Victor Phillips, Baptist Church of the Master, Cleveland.

Sermon: "The Spiritual Quality of Democracy," Theodore Soares, professor of religious ethics, California Institute of Technology, Pasadena, Calif.

8:00 p. m.

Topic: "Education, Propaganda and Intellectual Freedom."

Music: Cleveland All High School Orchestra: J. Leon Ruddick, conductor.

Panel Discussion: People's Platform, Lyman Bryson, Teachers College, Columbia University, chairman; James R. Drummond, *Christian Science Monitor*; Wilbur S. Forrest, *New York Herald Tribune*; Malcolm S. MacLean, University of Minnesota, and Clyde R. Miller, Institute for Propaganda Analysis, Columbia University.

Monday, February 27, 9:00 a. m.

Topic: "Administrative Foundations of Education."

Presiding: John A. Sexson.

Invocation: Rabbi Abba Hillel Silver, The Temple, Cleveland.

Presentation of Gavel: Charles H. Lake, superintendent of schools, Cleveland.

Greetings: Mrs. J. K. Pettengill, president, National Congress of Parents and Teachers.

Address: "A United Profession," Willard E. Givens, executive secretary, N.E.A.

Address: "Changing Conceptions of Educational Administration," George D. Strayer, Teachers College, Columbia University.

Address: "The Relation of Administration to Instruction," Sidney B. Hall, state superintendent of public instruction, Virginia.

2:15 p. m.

Discussion groups: First session, allied departments and organizations.

8 p. m.

Topic: "National Planning."

Music: Cleveland High School Festival Chorus of 1000 voices, Russell V. Morgan, conductor.

Address: "Natural Resources, Their Use and Conservation," speaker to be announced.

Address: "Human Resources and Their Development," Mary B. McAndrew, superintendent of schools, Carbon-dale, Pa.

Address: "Youth Faces Its Future," President Edmund E. Day, Cornell University.

Tuesday, February 28, 9:00 a. m.

Topic: "Schools in Small Communities."

Music: Festival Chorus of 2500 voices from Cleveland elementary schools, Russell V. Morgan, conductor.

Invocation: Rt. Rev. Msgr. John R. Hagan, superintendent of Catholic schools, Cleveland.

Greetings: Reuben T. Shaw, president, N.E.A.

Address: "Schools in Small Communities," the 1939 Yearbook, H. M. Corning, superintendent of schools, Colorado Springs, Colo., chairman of the commission.

Discussion: "The Village Revue," a group of high school pupils from small communities discuss their activities and opportunities; conducted

by Roy W. Hatch, State Teachers College, Upper Montclair, N. J.
Business Session: Reports of committees, nomination from the floor.

2:15 p. m.

Discussion groups: Second session.

8:30 p. m.

Special Feature Program: Members of the A.A.S.A. will be guests of the Associated Exhibitors.

Presiding: Frank Gregor Jr., president, Associated Exhibitors, N.E.A.

Greetings: President Sexson.

Presentation: American Education Award presented to Payson Smith by Alexander J. Stoddard, superintendent of schools, Denver.

Response: Payson Smith, lecturer, graduate school of education, Harvard University.

Wednesday, March 1, 9:00 a. m.

Topic: "Social Foundations of Education."

Music: Festival Chorus of 2500 voices from Cleveland junior high schools, Russell V. Morgan, conductor.

Invocation: Dean Chester B. Emerson, Trinity Episcopal Cathedral, Cleveland.

Address: "The Purposes of Education From the Standpoint of Society," Harry Elmer Barnes, editorial writer, New York City.

Address: "The Purposes of Education From the Standpoint of the Individual," L. Thomas Hopkin, curriculum specialist, Lincoln School, Teachers College, Columbia University.

Address: "The Purposes of Education From the Standpoint of the School," Ben G. Graham, superintendent of schools, Pittsburgh.

2:15 p. m.

Discussion groups: third session.

6:00 p. m.

College dinners.

8:00 p. m.

Topic: "The Challenge of Crime."

Presiding: William E. Grady, associate superintendent of schools, New York City.

Music: Cleveland High School Festival Band, Harry F. Clarke, conductor.

Address: "The Answer of the Community," Hon. Harold H. Burton, mayor of Cleveland.

Address: "The Answer of the Prison Warden," J. A. Johnston, warden, Alcatraz Prison, San Francisco.

Address: "The Answer of the Sociologist," Austin H. McCormick, commissioner of correction, New York City.

Thursday, March 2, 9:00 a. m.

Topic: "Economic Foundations of Education."

Music: Detroit Schoolmen's Club Chorus, Howard A. Love, director.

Invocation: Rev. Dilworth Lupton, First Unitarian Church, Cleveland.

Report: Committee on Resolutions, F. W. Jacobson, Oakland, Calif.

Address: "Making the Most of the Nation's Income," Fletcher Harper Swift, Stanford University.

Presidential Nominees

The five superintendents of schools who received the highest number of votes on the primary preferential ballot for president of the A.A.S.A. were Homer W. Anderson, Omaha; Nicholas Bauer, New Orleans; Ben G. Graham, Pittsburgh; Carroll R. Reed, Minneapolis, and James P. Vaughan, Chisholm, Minn. The result of the final preferential ballot will be announced February 1.

Exactly 400 persons received votes on the primary preferential ballot. The board of tellers conducting the elections this year consists of Supt. Raymond C. Burdick of Huntington, L. I., chairman; Edwin W. Broome of Rockville, Md., and Omer Carmichael of Lynchburg, Va.

Address: "The Rôle of Business in a Democratic Society," Allen A. Stockdale, representing the National Association of Manufacturers.

Address: "Education and Wealth," L. John Nuttall Jr., Salt Lake City.

2:15 p. m.

Topic: "Summarization and Implementation," a panel meeting summarizing major ideas and questions brought out during the convention.
Presiding: John W. Studebaker, U. S. commissioner of education.

Panel: John L. Bracken, Clayton, Mo.; Lyman Bryson, Columbia University; William G. Carr, Washington, D. C.; Prudence Cuthright, Minneapolis; J. B. Edmonson, University of Michigan; N. L. Engelhardt, Columbia University; John Guy Fowlkes, University of Wisconsin; Florence Hale, Darien, Conn.; Paul R. Hanna, Stanford University; Vierling Kersey, Los Angeles; Mary B. McAndrew, Carbondale, Pa.; Ernest O. Melby, Northwestern University; Paul R. Mort, Columbia University; Reuben T. Shaw, Philadelphia; Alexander J. Stoddard, Denver; Jesse H. Newlon, Columbia University; Kate V. Wofford, Buffalo, N. Y.

Report: Board of Tellers, Raymond C. Burdick, Huntington, L. I., N. Y.

Introduction: Newly elected officers.

8:00 p. m.

Broadcast: America's Town Meeting of the Air; first presentation outside New York of this popular N.B.C. feature.

Moderator: George V. Denny Jr., president, Town Hall, New York City.



At Cleveland's West Tech, specializing pupils are at work in the foundry.

Measuring Teacher Load

KENNETH W. EELLS

Statistician, Cooperative Study

HOW important for the welfare of the educational program of a secondary school is the working load of its staff members? What methods are available for measuring the working load? What are the advantages and what are the weaknesses of these methods? How does the working load vary in schools of different sizes, in different regions and under different types of control? What norms can be given for measurement of the teacher load of schools and of individual teachers?

The Cooperative Study of Secondary School Standards has attempted to measure in two different ways the teacher load of more than 4500 teachers in 200 representative secondary schools in every state of the United States. From the results of this investigation, some light may be thrown on the foregoing questions.

Two Methods of Measurement

The simplest and probably the most widely used measure of teacher load is the pupil-teacher ratio. The teachers in a secondary school with 35 pupils to each teacher are presumably more heavily loaded than the teachers in a school having 20 pupils to each teacher. The chief virtue of this method of measurement is its simplicity and ease of computation. It has two serious shortcomings.

The first is that it makes no allowance for differences in size of classes, differences in length of class periods, or for different degrees of responsibility for sponsorship of pupil activities, pupil guidance, study halls and other nonclassroom service.

The second is its lack of provision for comparing the teacher load of one teacher with that of another in the same school. Two teachers in the same school, one teaching six classes a day, with responsibility for two or three after-school clubs, and the other teaching two sections of each of two different courses, with no pupil activity responsibility, are obviously not operating under the same load even if they are in the same school. The importance of

some of these factors, which are omitted from consideration in a simple pupil-teacher ratio, will be indicated below.

The second method of measuring teacher load that was used by the Cooperative Study is the Douglass formula.¹ This formula takes into account not only the number of pupils that each teacher meets during the week but the number of class periods of teaching, the number of those periods for which the preparation is different from that of any other period, the nature of the subject taught, the amount of time given to nonclassroom activities (study halls, library, homerooms, pupil activities, administrative or supervisory activities, research activities, guidance and conferences) and the length of the classroom period. It gives a measure of the load of each teacher separately, the school load being computed as the average of all the loads of the individual teachers.

The Douglass formula uses as a unit the amount of work required in the preparation for and teaching of one class of 20 pupils in a foreign language or in mathematics for one class period of forty-five minutes and converts the other factors (nonclassroom responsibilities and variations in lengths of class periods) into equivalent amounts of work.

A few illustrations will serve to indicate the widely different actual teacher loads, as measured by the Douglass formula, that may exist in different schools that have the same pupil-teacher ratio. In a school of 500 pupils, with 20 teachers, the pupil-teacher ratio is 25. In school A the average teacher may be teaching 6 one hour periods a day, with 25 pupils in each class, with each period a separate class requiring a separate preparation on the part of the teacher, and with five hours each

week devoted to pupil activities and other nonclassroom responsibilities. In this case the Douglass formula gives 39.1 as the number, or index, representing the teacher load.

In school B, with the same pupil-teacher ratio, the curricular offering is not so varied and the typical teacher, instead of teaching six different classes, teaches two sections each of three different classes. In this case the Douglass formula gives 35.6 as the teacher load. School C, also with the same pupil-teacher ratio, differs from the first school in that the teachers have no pupil activity or other nonclassroom responsibility. The Douglass formula gives 36.2. School D is similar to school A, but operates with a forty-five minute class period. The Douglass formula gives 34.0.

As an illustration of a more extreme variation, school E is similar to school A, with the same pupil-teacher ratio, but the teacher has only four classes a day, with 25 pupils in each. The Douglass formula gives 27.0 as a measurement of the load. Lastly, school F is similar to the first school but has only 20 pupils per period for six periods. The Douglass formula gives 25.9.

Great Variation in Same School

Within a particular school great variation also is possible. In a school two teachers may each have 25 pupils per period for 5 fifty minute periods and yet have different teacher loads as expressed by the Douglass formula. If one teacher has no duplicate preparations, teaches history and civics and has eight hours a week of pupil-activity and guidance responsibility, his load is expressed as 34.5. Another teacher, in the same school, has two duplicate preparations, teaches industrial arts and has no extraclassroom activity; his load is 22.9.

The foregoing examples have, of course, been artificial ones, to illus-

¹Douglass, Harl R.: *Organization and Administration of Secondary Schools*, Ginn and Co., 1932, pp. 114-21.

trate possible variations. How much actual variation is found in real school situations? Some significant differences may be found by comparing different groups of schools among the 200 evaluated by the Co-operative Study. Figure 1 does this for schools of different sizes.² Each of the "educational thermometer" scales shows, by means of initials on the right side of the scale, the norms for schools of different sizes. On the right side of the scale these may be read in terms of the actual measure (*i.e.* either pupils-per-teacher or the Douglass formula index or number); while on the left side of the scale their percentile equivalents may be read. Thus, on the pupils-per-teacher thermometer, the norm for "very large" schools is 29.5, which is at the 10 percentile point. The black lines connect the corresponding norms on the two thermometers.

If attention is directed first to the pupils-per-teacher thermometer, it will be noticed that the ratio increases directly as the size of the school increases. Small schools average 18.6 pupils per teacher, medium-sized schools, 24.2; large schools, 27.4, and very large schools, 29.5. But the "teacher load" thermometer, which presents the more refined measurement of teacher load, indicates that the real situation is not so simple as first suggested. While the large and very large schools have a very unfavorable pupil-per-teacher situation, their real teacher load, when adjusted for activity and guidance responsibilities, duplicate preparation for classroom activity and other factors mentioned above, is close to average. The smaller schools show a definitely superior condition, by either means of measurement, but the pupil-teacher ratio seems to over-emphasize their superiority.

These relationships are presumably explained, at least partly, in terms of: (1) a heavier per teacher pupil activity load in the smaller schools, (2) greater delegation of guidance and supervisory activities to specialized persons other than teachers in the larger schools and (3) greater specialization as to subjects taught in the large schools, with a consequently

²The different sizes are defined as follows: small, under 200; medium, 200 to 499; large, 500 to 999; very large, more than 1000.

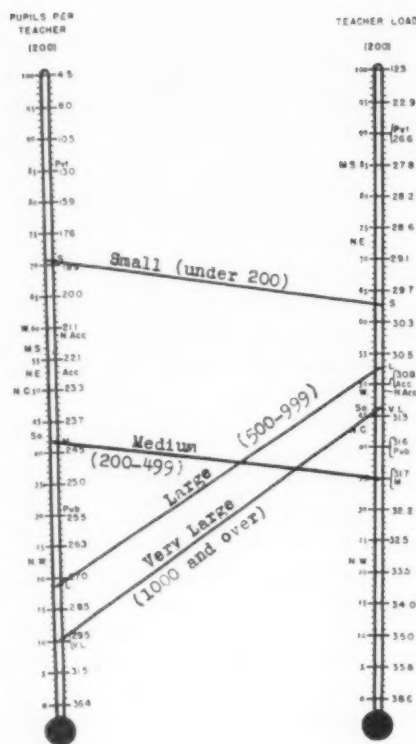


Fig. 1—Norms for different sizes.

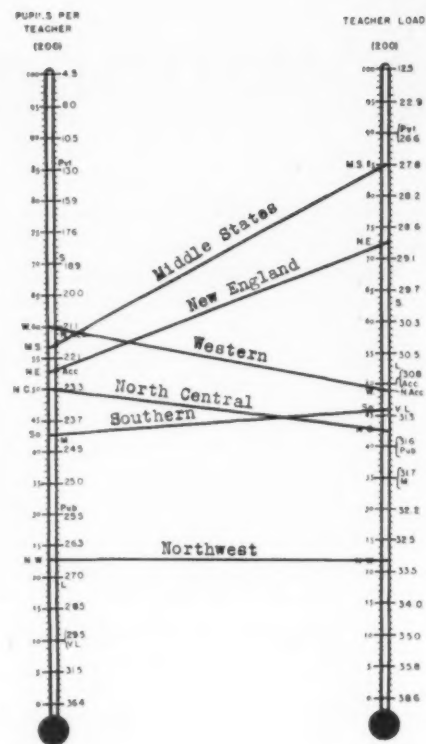


Fig. 2—Norms for six regions.

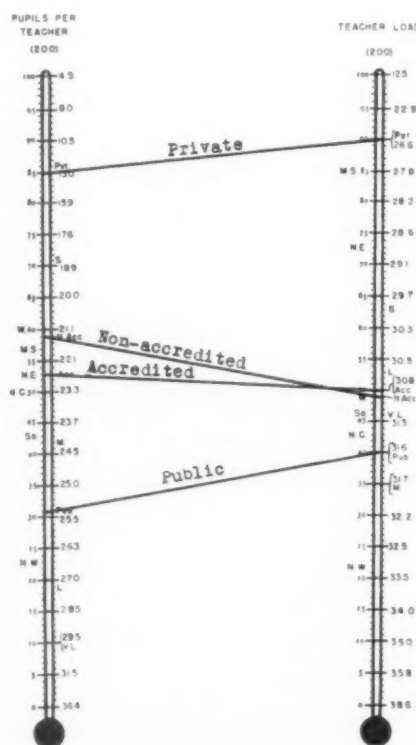


Fig. 3—Norms for the superior and inferior secondary schools.

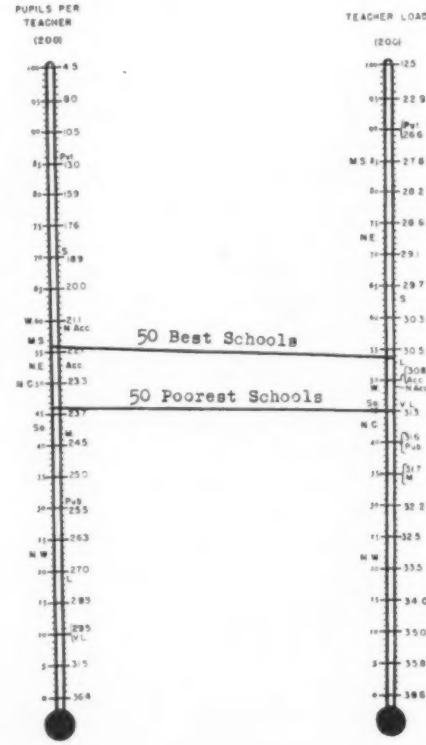


Fig. 4—Norms for schools by type of control and accreditation status.

greater amount of duplicate class preparations.

A similar comparison of different groups of schools by regional associations is shown in figure 2. The

schools of the Northwest are shown to be operating under heavier working conditions than those of the other regions, by either measurement. The schools of the New England

Chalk Dust

ADVICE to a candidate for a teaching position! When the superintendent is tired of asking you your weight, your height, whether you can teach a class in Sunday school, whether you have a voice that will be of use in the choir and whether you have a boy friend who will eventually take charge of you, turn the tables and ask one simple question:

"What, sir, is your educational philosophy? Where are you going in this business of education?"

For on the answer to that question depends much of your hope for the future.

• •

The Progressive Beats His Drum

There is something about a school band that is fine, fine, fine.

The general public likes it; it helps the football line.

Though it costs a mint of money,

To us moderns it seems funny

That the old-time teacher thinks of it as slightly asinine.

A school band makes us perky when we're blue, blue, blue.

It helps the school publicity and peeps the students, too.

The slip horn may sound sourly,

The budget may look dourly;

But the school morale is strengthened, it is true.

Let us take a music lesson from the drum, drum, drum;

Buy togas for the Latin class, and when folks say, "How come?"

We reply in tones of honey,

"Yes, indeed, it does take money

But it's only part and parcel of the new curriculum."

• •

IN THESE days of trial and error when the modern schoolmaster must, perforce, bend his curriculum to include tap dancing, adult education and the love life of the canary bird, it is well, my brother, to give a thought to the Pedagogical Wife.

Truly, the existence of Mrs. Superintendent is an unhappy one. Professional magazines print articles telling her how to behave. She is given advice by the Ladies'

Aid Society and Daughters of Temperance.

In the morning she arises after troubled dreams of insufficient budgets. She quiets the baby's howling, gets a permanent wave marked down to a dollar fifty, charging it.

At the noontide, she eats her meal in solitude while her spouse is haranguing Rotary. In the afternoon, protestingly, she is made chairman of the Women's Club delegation for bigger and better bird baths for the school playground. She plays bridge without fervor because the newcomer to town, who is sitting at a near-by table, rants that the new guidance program has flopped.

She hurries home and gets dinner but eats it in solitude. Through the lonely evening, while the Forum is in session, she mends the spare pair of professorial pants.

In the midst of her exile, O my brother, forget not to look at her occasionally and, when visiting the state capitol, send her a telegram (night rate) so that she may know she is not a P.W.A. widow forever and ever. Let her sometimes fondle the blueprints of the new school, provided she promises to keep her mouth shut.

• •

THE well balanced teacher must not be impatient when his dreams and visions find slow acceptance. Education, at best, is a leisurely process. A century ago, significant Americana included the Spelling Bee, the Singing School and funny hats for females. But America today has changed. The national hero is a dummy, the greatest actor is a mouse and women's hats are funnier than ever. There is still room for education.

• •

"AFTER all," says Peter Freuchen, Arctic explorer, "a new adventure is only a new way of meeting life, and there is no way I know of to avoid meeting it. In fact, it's all adventure."

The pedagogue, as he plods wearily homeward, after a day spent in picking up the pends much of your happiness and your papers that litter the school lawn, in brushing off some dusty curriculum or in inspiring some timid teacher to greater deeds, may echo those words: "It's all adventure!"



Federal Aid Without Control

M. M. CHAMBERS

Specialist in School Law

AS CHARLES A. BEARD so eloquently says, "The future comes." There is no doubt that substantial federal aid to the states for general education is on the way and coming nearer. It is no longer merely "on the horizon" as I indicated two years ago.¹ During these two short years much progress has been made. The semblance of an argument against collecting money by federal taxation in one state and spending it in other states has been exploded. In the wealthiest states and cities the necessity of federal aid for education, to be distributed so as to favor disadvantaged areas, has come to be recognized.

Accepted equally widely and enthusiastically is the principle that the national government can and should subsidize general education without entangling the schools in a maze of federal regulation which would cripple or paralyze state and local administration while creating enormous congestion at Washington and flooding the country with a horde of traveling federal functionaries. Great harm could be done by requiring minutely detailed plans to be approved by a distant federal authority and by making expenditures subject to disallowance by federal pre-auditors, with the consequent covert transfer of real control to the national administrative center.

The bills drafted to provide federal aid for education have undergone several revisions and have been ably debated, both in congressional committee hearings and in the educational and lay press. The President's Advisory Committee on Education issued its recommendations a year ago.² Distinguished educational administrators have cogently discussed different features of that report and of the bills ostensibly designed to implement it. In the present session of

Congress a federal aid to education bill of 1939 is in the hopper.

This bill would make appropriations for a six year period for general elementary and secondary education and six other educational purposes, in almost precisely the same amounts as recommended by the committee.

For the first four purposes listed in the accompanying table (elementary and secondary education, teacher-preparation, school buildings and aid for the administration of state departments of education) apportionment would be to the states in proportion to an index of financial need derived by subtracting 65 per cent of each state's index of financial ability from the state's index of educational load. The index of educational load in each state would be defined as the percentage that the educational load

of net incomes of \$25,000 and above.

It is possible that the bill in its final form may specify these indicators and their respective weightings in precise detail or, instead, leave some latitude for administrative discretion. In any event, the index of financial ability must be derived from a formula applied alike to all states. Likewise, for the determination of educational load, the bill may specify exactly how the school population shall be weighted in accordance with the differences in educational costs (outside the control of the states) as between rural areas and cities of different classes, or it may leave limited discretion in this respect to the commissioner of education.

The upshot is that each state's index of financial need, and hence the actual amounts of federal money it

Provisions of Proposed Education Bill for 1939

Appropriation for	1939-40	1940-41	1941-42	1942-43	1943-44	1944-45
(In Thousands of Dollars)						
Elementary and secondary education.....	40,000	60,000	80,000	100,000	120,000	140,000
Teacher education.....	2,000	4,000	6,000	6,000	6,000	6,000
School buildings.....	20,000	30,000	30,000	30,000	30,000	30,000
State education departments..	1,000	1,500	2,000	2,000	2,000	2,000
Adult education.....	5,000	10,000	15,000	15,000	15,000	15,000
Rural library service.....	2,000	4,000	6,000	6,000	6,000	6,000
Cooperative research.....	2,000	2,000	3,000	3,000	3,000	3,000
Total.....	72,000	111,500	142,000	162,000	182,000	202,000

in that state is of the total educational load for all the states, determined annually by the U. S. commissioner of education in terms of the number of inhabitants aged 5 to 19 inclusive. The index of financial ability would be estimated in similar fashion by the secretary of the treasury in terms of several indicators, such as: (1) aggregate income and wealth of the citizens of the state, (2) volume of retail sales, (3) total population, rural population and urban, (4) number of motor vehicle registrations, (5) value added by manufacture, (6) weighted farm cash income, (7) gross postal receipts, (8) total of net incomes between \$5000 and \$25,000 and (9) total

would receive, would be dependent upon the uniform application of a necessarily complex formula, gauging its relative position among the states with reference both to its educational load and its financial ability. The intention is to make money available to the respective states in inverse ratio to their ability to support education from their own revenues.

No matching of federal funds by the states or local subdivisions is required except in the case of the appropriations for school buildings. Here the commissioner of education would be directed to certify for payment 50 per cent of the cost of each project, exclusive of purchase of land

¹Chambers, M. M.: "Federal Aid on the Horizon," *The Nation's Schools* 19: 29-31 (Jan.) 1937.

²The Advisory Committee on Education, Report of the Committee. Washington, D. C.: Government Printing Office, February 1938.

but including improvements thereon. An exception is made for legally constituted school attendance units which were without publicly owned school facilities in the fiscal year 1937-38. In such cases the commissioner could certify up to 90 per cent of the cost of the project. There are considerable numbers of such units in many states, especially in the South, where schools are conducted in makeshift and unsuitable quarters, rented or donated.

A general provision of the bill requires that, in order to qualify for receiving funds, a state must provide a plan for allocating and disbursing them in such manner as to carry out the purposes set forth in the respective parts of the bill in which the appropriations are made. The state legislature must either enact such plans or provide for their making by the state educational authority. Apparently the acceptance of the plans by the U. S. commissioner of education is made a ministerial duty involving no exercise of discretion, and therefore little possibility of federal dictation. The federal check on the lawful expenditure of the funds comes only at a later stage, through post-auditing and examination of the reports required from the states. Failure of a state to restore any funds lost or unlawfully expended or failure to make reports as required would justify suspension of payments by the commissioner after notice and hearing.

No Provision for Research

The apportionments to the states for the fifth and sixth purposes (adult education and rural library services) would be on the simple bases of adult population and rural population, respectively. For the seventh purpose (cooperative educational research, planning and demonstration projects) distribution among the states and allocation of funds to projects would be wholly in the hands of the commissioner of education. In fact, not more than 50 per cent of the appropriation would have to be so distributed. As much as 50 per cent could be expended directly by the commissioner in carrying on research and planning activities and in performing services necessary to the administration of the whole bill. He

would be authorized expressly to pay the expenses of conferees whom he might call to Washington or elsewhere at his discretion. All in all, his powers under this part of the bill would add up to an imposing total. It will be observed that no provision is made for federal aid for any research enterprise except at his discretion; in other words, no aid for research exclusively authorized and controlled by a state or state agency.

Controversy Is Normal

Whether this may tend toward too great federal centralization and control of research is a question. The answer would depend partly upon the temperaments and policies of successive commissioners. Probably the federal-state relationships will have to be defined by the courts in litigated cases over a period of years. That, of course, would not be unprecedented. It is, indeed, the normal course in the evolution of our law and social policy.

The bill contains declaratory clauses proclaiming that it shall be so construed as to maintain local and state initiative and responsibility in the conduct of education and "to reserve explicitly to the states and their local subdivisions the administration of schools, including institutions for the preparation of teachers, the control over the processes of education, the control and determination of curriculums of the schools, the methods of instruction to be employed in them, the selection of personnel employed by the state and its agencies and local school jurisdictions," and the determination of the best uses of the federal funds insofar as is consistent with the purposes of the bill. This ringing declaration would have its weight in court, along with the precedents of a century and a half of experience in the development of our federal-state system.

The bill embodies a commendably broad and modern conception of the scope of the educational function. The appropriations for general aid to elementary and secondary education would be made available to all activities ordinarily carried on in the schools and "such health, welfare and recreational activities for children and youth as are placed under the direction of public elementary and secondary schools through community plans

developed with the cooperation of other state or local medical, health, welfare and recreational agencies and organizations, especially those financed in whole or in part by funds derived from federal appropriations."

Aid could go to school library service available to the general public if the state or local school jurisdiction so chose; to nursery schools and kindergartens and services for handicapped pupils; to educational and vocational guidance, vocational education and rehabilitation and placement activities in cooperation with public employment agencies; to junior colleges, technical and vocational institutes, and other educational programs primarily for youth under 20 years of age that are operated as parts of public secondary schools through the fourteenth grade; to part-time, civic, vocational and general adult educational and recreational activities under the auspices of public school systems; to provision of textbooks and other instructional supplies, and to transportation of pupils.

Availability of Funds

Funds would be available only to states showing that their expenditures out of their own revenues for the total of these purposes during the preceding year were not less than in the school year ended in 1938, unless this was rendered impossible by act of God. Conceivably widespread and disastrous drought, for example, might be so construed.

In states maintaining segregated schools, an equitable distribution of the federal funds for the benefit of the minority race not less than proportionate to their numbers in the population is required. Safeguards designed to prevent the use of the funds in any vocational or industrial-plant scheme for the exploitation of youth under the guise of vocational training are provided. Lastly, the bill directs the President to appoint, not later than May 1, 1943, a committee to make a comprehensive investigation of federal relations to education and report with recommendations by March 1, 1944. Probably such a committee at that time would find answers to some of the questions now open and would contribute a worthy sequel to the notable report of the Advisory Committee of 1938.

The Principal *May* Be Wrong

CHESTER C. DIETERT

SINCE the principal of a modern high school is in contact with a variety of groups with dissimilar interests, he must have versatility, broad abilities and tremendous composure. He deals more or less specifically with the following groups and interests: (1) public, (2) parents, (3) community organizations, (4) state board of education, (5) local control of education, (6) teachers and (7) pupils. In the daily routine of his work the principal comes directly and continually into contact with the last two groups named.

This discussion will be limited to the consideration of problems that concern these two groups, especially as these problems come to light in dealings with teachers. Pupil problems will be considered only as incidental to those that arise between teacher and principal. A further limitation will be placed upon the discussion in that we shall dwell upon possibilities wherein error on the part of the principal may be evident. The principal may be wrong. There are things that a principal has no right to do. The teacher may be right. And yet there are many principals who violate this code of procedure.

No Executive Tantrums

1. No principal has a right to throw a fit of anger for the benefit of a teacher. This is especially true when this is done in the presence of other teachers or in the presence of pupils. He gains no good for himself and he certainly is not helping the teacher, granted that she is wrong. If he becomes angry with a teacher in the presence of other teachers or pupils he is doing irreparable harm to the school organization, its personnel and its morale.

2. The principal has no right to criticize any teacher in the presence of pupils. Criticism should be made privately. Both pupils' and teachers' attitudes are harmed by the open condemnation of the procedures or

methods of a teacher. He will undermine the morale and discipline of his school by such direct interference.

3. The principal has no right to use sarcasm with a teacher. Instead, he should try to evoke the best in a teacher. Sarcasm always invites antagonism. A principal who is habitually sarcastic is admitting one of two things: Either his disposition is hopelessly inadequate for administration or his abilities to cope with a problem at hand are insufficient. In either case he should not be a principal. Sarcasm is an escape for the inefficient. When a baffling situation arises he believes he has solved it when he becomes angry or sarcastic. No greater mistake could be made by a principal.

Nagging Never Works

4. A principal has no right to nag at a teacher. No teacher is so bad that there could not be some praise of her work. Praise works where sarcasm and nagging can never work. The principal must learn to appreciate the efforts and attitudes of the teacher. She has had training as well as he, perhaps in a different school, under different environment and under different instructors, but nevertheless a training that fits her for the work she is doing. He must remember that he does not have a monopoly upon good procedures and methods. The teacher's method may be even better than his. He must be broad enough to see one of his pet theories set aside by the practical methods of another.

5. The principal has no right to set aside or reverse a disciplinary decision of a teacher. If a reversal is advised, it must be advised to the teacher in privacy and the teacher must make the reversal to the pupil herself. The principal has no right to superimpose his judgment hastily in the presence of pupils. The only exception to such rule should occur when there is imminent danger of

Ten commandments of professional conduct in relation to teachers are set forth in an article by the high school principal at North Judson, Ind.

extreme disorder, riot or other unforeseen emergency. Then it becomes his duty to assume responsibility. In ordinary cases in the daily routine of school life the principal should support with vigor the disciplinary decisions of the teacher. She has a right to expect the support of the principal and if he knows what is good for the morale of his school he will support the teacher. A principal has it in his power to make or break the discipline of a teacher. When a teacher fails in discipline it may be the principal's fault.

6. The principal has no right to carry a grudge against any teacher, nor has he a right to let a grudge influence his attitude of cooperation with that teacher. On every teaching staff there are personalities that sometimes do not supplement each other well. It is nothing to the credit of the principal if he can cooperate only with personalities that seem to suit his own. Rather his ability to cooperate is tested by his powers of adjustment to all the different personalities with whom he comes in contact. If he lacks this power of adjustment he does not possess one of the essentials of a good administrator.

7. The principal has no right to make one set of regulations public to the pupils and then require teachers to adhere to another code. This is sometimes done in regard to passing and failing of pupils. The principal admonishes pupils that they will fail unless certain requirements are rigidly met and then admonishes teachers that they cannot or must not fail anyone or certain ones in

their classes. Such inconsistency must be condemned. It is not sound educational policy. The principal should determine a policy, make it plain to both teachers and pupils and adhere strictly to that policy.

8. The principal has no right to budget the time of a teacher. This is her problem. He can only determine a general policy for all teachers. During the curricular day the teacher has a right to have some time for herself, for the care of her

person and to eat. Health is such an important consideration today in the schools that to deny it to teachers is a grave sin. No assigned duty is so important that it must take precedence over physical needs. The program of the day should be so arranged that the assignment of hall duties and gymnasium supervision should not interfere with the welfare of the teacher. All the many duties that are crowded upon the teacher should be considered. During the

depression, when many school systems attempted to conserve, the duties of teachers were increased as the number of teachers was decreased so that the extra burden weighed heavily upon many teachers. The principal should recognize this in his arrangements.

9. The principal has no right to expect a teacher to assume responsibility for many extracurricular activities, however efficient she may be. He has no right to assign many such duties to one whom he knows to be inefficient in an attempt to develop abilities in her. She may develop abilities if given a minimum of load to carry in the extracurricular field.

10. The principal has no right to hurl accusations or to make snap judgments concerning the teacher. Nearly always such judgments are wrong. He has no right to expect his teachers to be broadminded if he cannot exercise this quality himself. He must learn to place himself in the teacher's position. He must not be an autocrat. If schools are really to be a factor in teaching democracy the principal should see to it that the practice of democracy starts with him. How can he expect teachers to teach that which he does not practice?

This list of "wrongs" on the part of the principal does not exhaust the possibilities. However, it does include most of the grievances against the principal on the part of the teacher. If the principal makes these ten "wrongs" the basis of ten commandments for his attitudes and conduct he will be on the road to develop a better regulated and more efficient school. Work will not be a grind but a pleasure. It is largely a matter of attitude and manner of approach to the many problems a school presents.

A teacher soon senses that the attitude of the principal is cooperative and appreciative and democratic if it is genuinely so. Cooperation is not a one-sided affair to be engaged in by the teacher alone. Cooperation is none the less genuine when it begins with the principal. The definition of the word suggests that it is a two-sided problem. When there is trouble between principal and teacher, the principal may be wrong.

Working Out a Salary Schedule

LOUIS M. KLEIN

Superintendent, Harrison, N. Y.

THE board of education of Union Free School, District No. 6, Harrison, N. Y., two years ago appointed a salary schedule committee consisting of two board members and the superintendent of schools. This committee met at least once a month for eight months and discussed the advantages and disadvantages of different types of salary schedules, principles upon which a salary schedule should be based, purposes of a salary schedule, how much Harrison could afford to pay its teachers, number and size of increments, and how to determine minimum and maximum salaries. Among other things, the committee decided to make a study of the estimated annual cost of living of teachers employed in the school system.

While Harrison's board was attempting to solve its salary problems, the boards of education of Rye and Rye Neck were working on the same question. Since these communities are adjacent and since they have much in common concerning type of pupils, size of school system, type of community and the amount of money they could afford to pay for teachers' salaries, it was mutually agreed to hold combined meetings of the three boards and their officers.

Following these combined meetings, the Harrison salary schedule committee submitted a complete report of its recommendations. The committee unanimously felt that the board should analyze its report and that a subsequent committee should

complete the work of the first committee. The second committee took over the work.

The teachers of our school system also had been making a study of the salary schedule and a joint meeting was held with this committee. The two reports were found to be basically alike. A few minor differences of opinion were discussed and, as a result of this discussion, complete agreement was reached between both committees as to the final report of the board salary schedule committee.

The committee's report was unanimously adopted by the board. This is the first year of operation of the new salary schedule. It has resulted in the following:

1. There has been a general uplift of teacher morale.

2. Better trained and experienced teachers are attracted to Harrison.

3. Superior elementary school teachers remain in elementary teaching whereas, formerly, they endeavored to get into high school teaching because high school teaching paid larger salaries.

4. There has been a general improvement in teachers in service. This is brought about by additional compensation paid to teachers who advance from one level of training to another by taking approved courses.

5. A better understanding exists between faculty and board because of the joint meeting of board and faculty salary committees.

A copy of this single salary schedule may be obtained on request.

What Size School System?

HOME RULE, or local control, must prove adequate and efficient in serving local needs if it is to persist. This is true for school control, as well as for local political units, business control, banking, labor organizations, church work, health administration and the like. If local units of school control can provide satisfactory curriculums, can obtain and keep good faculties, can plan and provide adequate school plants and programs of pupil activities, can provide special care for children in need of such care and can do these things without undue waste of money and duplication of effort, then, and only then, can they hope to maintain their dominance in determining local school matters. If they cannot do these things and do them within a fairly short time, control of schools will pass into the hands of centralized authorities, probably state or national.

Many people believe that the passing of school control from local to centralized hands will constitute a grave menace to democracy. Certainly there are possible values of local control and local responsibility that make it important to consider what kind of home rule may prove effective enough to survive.

Where Small Units Fail

Size is one of the significant characteristics of the local unit that can hope to be efficient enough to survive. The small unit, notably the common school district that has only enough children to justify a one teacher elementary school, has failed to provide either the quality or extent of education that seems necessary. And yet, when one speaks of home rule, it is exactly this common school district that is in the minds of many people.

The phrase "local unit" means different things in different sections. Southerners are inclined to think in terms of county units. The New Englander and residents of the North-Central states think in terms of towns or townships. Many Westerners think in terms of common

NORMAN FROST

If local schools are to remain locally controlled, they must be effective and economical in furnishing education, or else local authority will pass on to state or national control, concludes Professor Frost, George Peabody College

school districts with a differing emphasis on high school and consolidated districts. For all there is a complex of subsidiary ideas of special districts, independent districts, city schools, associated schools, supervisory districts and special services, such as state or regional schools for the blind, state directors of elementary schools, teacher training institutions and the like.

From this confusion of terms, there are two ideas in regard to local units that constantly emerge. The first, and the one most frequently in evidence, is that of the community. According to this idea, social and economic considerations should be basic. Political lines may be, and frequently should be, ignored, as in the case of villages or other community centers that lie near county or state lines. The idea is frequently confused with neighborhood, as is to be expected, since accurate use of the term community, even by sociologists, is recent.

Galpin's word "rurban," horrible as it is, connotes a center that renders both social and economic service to a surrounding area, the entire area to be considered a community. In this sense, many of the rural counties become communities, and the special school districts so frequently organized by those in the county seat

towns constitute real attempts to break down the true unity of community interest. It is in such counties that the "county unit" is developing most satisfactorily.

The second idea of local units of school control is usually called the "administrative unit." The basic idea in this case is that the functions to be served determine the size necessary to make possible the economical and efficient rendering of the needed services. For example, if special classes should be available for crippled children, the local district or unit should be large enough to make it likely that enough crippled children will be included to justify a special class. This would require a total of 4500 children in the local unit. In the same way, each function or service that should be rendered is considered and the desirable size is taken to be that which can provide adequately for most of the functions deemed desirable.

Size Is Local Problem

Within such administrative units provision may be made for communities, usually referred to as "attendance areas." The problem of school size in this case becomes a problem for the local school administration to solve, rather than a basis for defining the local unit.

Whether the community idea or the administrative unit idea is taken as basic in planning local units for school control, the question of the minimum number of pupils that may justify adequate service becomes of paramount importance, particularly in sparsely settled regions. The geographic area may, in a few cases, limit the number of pupils that may be reached, but such conditions are exceptional now and with further construction of good roads will become even more so. In the same way, the matter of support is coming to be settled by state and federal grants or aids rather than by local wealth. The idea of getting money where it is, to be used in educating children where they are, has become generally ac-

cepted. The real question remaining, therefore, concerns the size of the local unit in terms of children to be educated.

Three types of studies relate to the number of pupils needed for a good school system.

First, there are studies of optimum school size. These almost assume the community viewpoint rather than that of the administrative unit insofar as they consider the question of general school control. Typical of such studies, and a recent one, is that by Seyfert.¹

Seyfert considers the question of size in relation to efficiency of high schools. To make his findings applicable to six year, four year and three year high schools, he measures size in terms of the number of pupils per grade, finds that high schools having less than 60 pupils per grade are necessarily limited in many ways because of their small size, and that beyond 150 pupils per grade improvement resulting from increased size is slight.

Limits for Systems

His point of view is that of the efficient local high school rather than that of the efficient local school system. His findings may be translated into minimum limits for systems if it be assumed that a local system should include high school facilities. Thus a school system that provides twelve years of education with 60 children in each grade must have, by simple multiplication, at least 720 children. As a matter of fact, with elimination and retardation considered, the total number of children necessary to provide a high school graduating class of 60 each year is probably at least twice as great, making about 1500 to 2000 children necessary for a system that can be in any way efficient, and 3000 or 4000 would be much better.

This may be looked upon as some indication of the size of scholastic population needed for a good community school system. The current movement toward integrating village life with that of surrounding open country areas and of the consolidation of neighborhoods into communities is a necessary part of establishing

such school systems. At any rate, the evidence indicates that smaller school systems will be handicapped because of their size. Local school units smaller than indicated will be inefficient, almost inevitably, and cannot hope to survive.

A second type of investigation concerning size necessary for local school systems concerns itself with the services that such systems should render and the number of children needed to make such services effective and economical.

Grouping School Units

Then, as the studies of school size rather assume the community point of view so this type of investigation assumes the efficient administrative school unit as a goal to be achieved, probably by grouping two or more communities or attendance units into this larger administrative system.

This approach to the question of what should be the size of a local school system is taken in the 12th Yearbook of the Department of Superintendence, by Morrison, Morphet, Dawson and others. Dawson's work may be considered typical. He says:

"An administrative unit should be sufficiently large to warrant the provision of all administrative and supervisory services except those provided directly by the state. Ordinarily several elementary-junior-senior high school attendance units will be involved."² Briefly, he concludes that a local unit is possible on a fairly respectable basis with some 1800 children but that it would be much better with about 10,000 children.

The third type of investigation bearing on desirable size of local school systems asks only what size of local school unit works best. It makes no assumption as to whether sociological communities or administrative efficiency should be the basis.

This is the approach of the state and county survey. Usually the question of desirable size of local units is a subordinate one and data are not organized to answer it definitely. From evidence presented in such investigations it is clear, however, that

in every state the smaller units are too small. In many instances it is equally apparent that the larger local school systems are too big. This may not shed much specific light on the question at issue but it gives some guidance as to the general direction in which the answer to desirable size is to be found.

One investigation in Tennessee becomes specific in its implication. Counties having some 7000 or 8000 children were found most effective in certain aspects of school work and economical in costs of general control. The next most effective school systems were in counties having 2000 to 3000 children but these systems ran high in costs of control.

In the same state independent districts having 4000 to 5000 children were the most effective and at the same time most economical. Effectiveness is much less and cost of control much greater as the size of these districts decreases. The number of cases for larger districts is not great enough to warrant conclusion concerning them.

Evident Results

With the general results of these three types of investigations in mind, the original proposition and the question involved become plain and the results may be stated in the form of a syllogism.

Major Premise: If local school systems are to maintain control of local schools, they must be effective and economical in furnishing education.

Minor Premise: If local school systems are to be effective and economical in furnishing education they must have at least 1500 children (this is the lowest minimum figure for any of the three types of investigation) and they should have more (probably their effectiveness and economy will both increase up to about 10,000 children).

Conclusion: Unless local school systems are organized to include 1500 or more school children, it may be expected that effective control of schools will pass from local hands to regional, state or national authority in the future.

Corollary: School teachers are likely to serve an authority or a bureau in the near future rather than serve a locality or community.

¹Seyfert, Warren C.: *School Size and School Efficiency*. Cambridge, Mass.: Harvard University Press, 1937.

²Dawson, Howard A.: *Satisfactory Local School Units*. Nashville, Tenn.: George Peabody College for Teachers, 1934.

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School Finance Laws in Kansas

SINCE the passage of new school finance legislation in Kansas in 1933, its results on the schools of the various communities of the state have been widely discussed.¹ Because the budget, the cash basis and the tax limitation laws play such vital rôles in Kansas school affairs, it has seemed important to learn what actually has been their effect rather than to depend upon opinion.

Thirty-one cities of the second class were chosen for study. Statistics concerning each of the districts for the three years preceding the enactment of the laws, 1931 to 1933, and for the three years following, 1934 to 1936, were taken from official reports. To obtain additional information, questionnaires on each of the three laws were sent the 31 superintendents involved.

The reports show that, although the average attendance in the 31 schools was 20 greater in 1936 than in 1933, the average number of teachers employed was 2.4 greater in 1936 than in 1933, indicating that the laws did not force upon the school unusually large teacher-pupil loads, since at no time during the period studied was the class size larger than 30.

Twelve of the schools issued bonds during the first three years after the new legislation was passed, only one less than the 13 schools that issued bonds in the previous three years, an indication that equipment expansion was as possible to the districts after 1933 as it had been before.

Perhaps more significant than any other figures are those indicating how drastic was the cut in assessed valuations, which began before the new laws went into effect. The average assessed valuation per pupil was more than \$1000 less in 1933 than it had been in 1931. This large decrease was naturally a vital factor in cutting school income.

¹Scott, I. O.: *The Effect of the Recent School Finance Laws in the State of Kansas*, Greeley, Colo., Field Study No. 3, Unpublished Doctor's Field Study, Colorado State Teachers College, 1938.

IRA O. SCOTT

The schools spent less for general control in 1936 than they had in 1933, but they had spent less in 1933 before the new legislation went into effect than they had in 1932, thus indicating that the decreased expenditures could not justly be attributed to the new laws. Similarly, the schools spent less for instructional purposes in 1936 than they had in 1933, but also less in 1933 than they had in 1932, showing that the decline in teachers' salaries was well under way before the effects of the new school legislation could be felt.

Although the total amount spent for general control and the amount spent for instructional purposes were less in 1936 than they had been in 1933, the amount spent for operation, maintenance and fixed charges was greater in 1936 than in 1933. This

imum provided for by the law and only three schools had taken advantage of the clause of the tax limitation law that permits a district to increase its own maximum by a majority vote at a special election. Reduced school expenditures cannot be attributed to the restraints imposed by the finance legislation.

The balances recorded for each of the districts show that prior to 1933 the districts were more frequently left at the end of the fiscal year without a working balance than after the enactment of the new legislation. Moreover, the size of the balances recorded shows that in almost every case the schools could have expended larger sums for general school purposes if it had been the will of the community that money be so spent.

A consideration of the available data, then, seems to point to the fact that the new legislation placed the educational systems of these 31 districts in no jeopardy, but rather, as

Legislative restrictions on Kansas school finances have compelled careful educational planning so that present inadequate funds are purchasing a quality of school equal to that of a more affluent period, it is revealed in a survey made by the author, the dean of Garden City Junior College, Garden City, Kan.

makes it clear that the reduction accomplished in the total was effected by reducing instruction costs, the main item of which is teachers' salaries.

In spite of the decreased school expenditures in 1936, the 1936 mill levy for all school purposes was larger than the 1933 levy. The mill levy for general purposes was also greater in 1936 than in 1933, indicating a general willingness on the part of the people to overcome for their schools whatever disadvantages the sharp reductions in assessed valuations had caused, but only 10 of the 31 schools were levying the max-

the majority of the superintendents pointed out in their responses to the questionnaires, benefited the schools by providing for more careful planning and stewardship of funds.

In reporting upon the effect of the budget law upon their districts, the superintendents indicated that in all but one of the 31 cases, the superintendent has part or entire responsibility for making the budget, which is carefully planned, eliminating guesswork. In 13 of the cities the new law had made necessary a change to the use of the more detailed and systematic budget, indicating that the law had been instru-

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mental in forcing correct budgetary procedure in more than a third of the cities involved.

Twenty-eight of the superintendents reported that their districts had been able to meet current school operating expenses under the restrictions imposed by the cash basis law passed in 1933. Twenty-two reported that the law had had no effect on the building program, four, that the building program had been aided and five, that it had been retarded. Only seven schools reported any curtailment of expansion or adoption of new equipment, while 24 were able to manage any necessary expansion. Public opinion favors the law in 19 cities, and in the other cities there was no marked attitude for or against it.

Replies on the tax limitation law show that before the law was passed only about half of the schools had been exceeding the limit set and that, following the passage of the law, only one-third of the districts used the maximum levy provided.

Financial limitations that have oppressed the schools since the enactment of the finance legislation can be traced to the economic conditions that forced the cut in assessed valuations before the laws were passed rather than to the laws themselves. Moreover, the budget, the cash basis and the tax limitation laws have compelled careful planning so that the funds now available for school purposes, even if inadequate, have in most schools bought a quality of school in most cases nearly equal to that purchased by the funds of the more affluent period.

However, it seems probable that certain modifications would enhance the beneficial effect of the laws, allowing the various districts to profit even more from their operation.

For example, provision should be made for greater uniformity in the accounting systems required of the various districts. This could best be accomplished by making the state superintendent responsible for devising the budget form in order that its organization should conform with the other reports that must be made to his office, thus eliminating the keeping of accounts in several different forms as is now necessary because of the variety of forms used

for the different reports required from each district.

Such a change in budget form should also eliminate illogical classification of certain school expenses as they are entered in the present budget form. For instance, special departments, such as the special subjects, physical education, music and the like, should not be itemized on the budget unless such subjects as Latin, English or mathematics are also similarly itemized.

It is also suggested, since the public hearings of the budget are not attended by a representative group of school patrons and since the budget is rarely if ever changed after such a hearing, that the requirement for the public budget hearing be discontinued.

A majority of the superintendents suggested that the cash basis law be modified, allowing the district board to issue emergency warrants not to exceed 25 per cent of the budget and to issue warrants in amount equal to the delinquent taxes, those warrants to be paid when the delinquent taxes were paid.

In second class districts especially, when school elections are not held

annually, it would seem practical that the tax limitation law be so modified that the board of education be allowed to raise the maximum levy up to 25 per cent of that levy, instead of submitting the question for vote, since the board represents the community's choice and can take care of emergency needs in the community more economically than by election.

School finance could further be stabilized if the maximum levy were adjusted to accommodate fluctuations in assessed valuation; *i.e.* the 14 mill maximum could be based on the 1933 valuations, which were low, and then the maximum for each year could be raised or lowered in indirect ratio to the increase or decrease in assessed valuations so that the school income would remain uniform.

In connection with both the budget and the tax limitation law, it would seem practical that a school district should be permitted to levy for the accumulation of a surplus fund to be used for a specific purpose. Such provision would make possible a school expansion program on a cash basis in keeping with the general tenor of the three new laws.

Picture of a Kansas Rural Principal

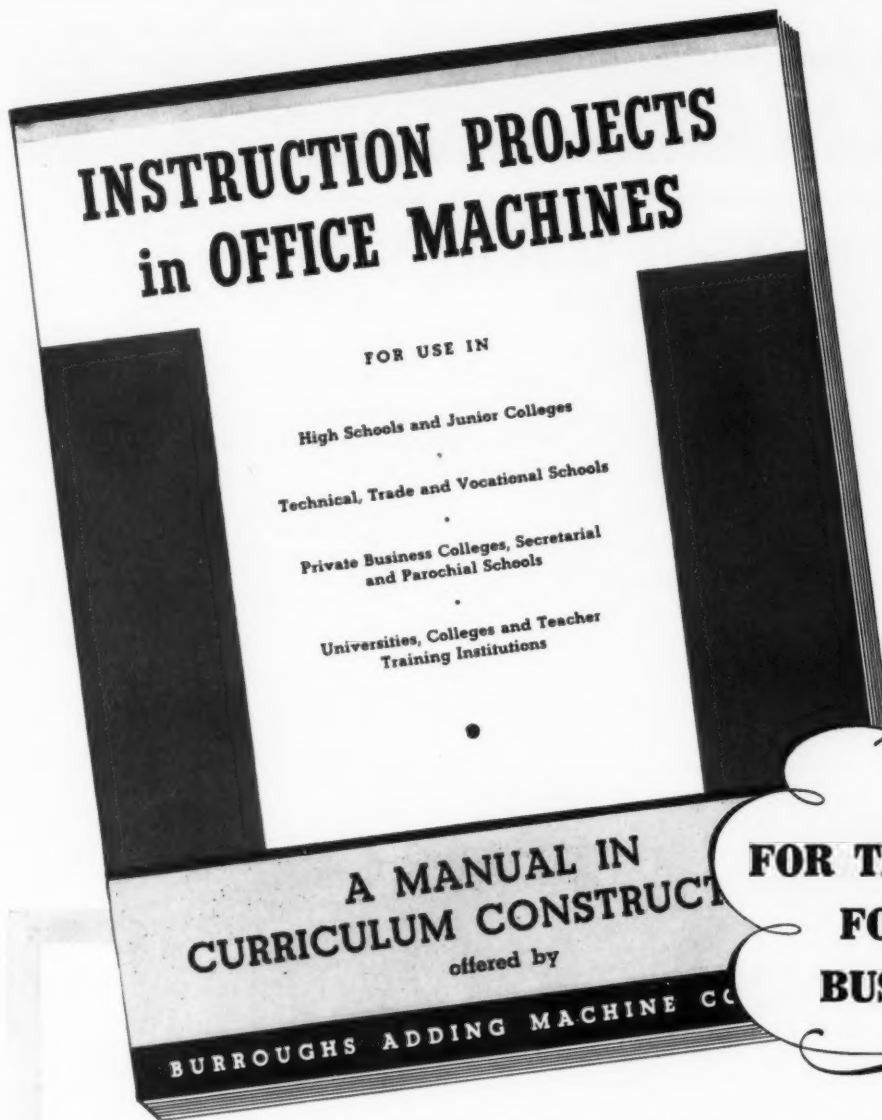
THE average rural high school principal in Kansas has supervision over four teachers, teaches four classes a day, in addition to administrative responsibilities, and more often teaches social science than any other subject, according to a recent study for Kansas State Teachers College of Emporia by Lyle Warren Hilbert.

The salaries of rural high school principals range from \$600 to \$3380. The average salary in this type of school is \$1511 and the median salary paid in Kansas schools of this type is \$1450. There is a tendency for the salaries of principals to increase with enrollments.

The average number of years' teaching experience of rural high school principals in Kansas is 14.02 years, and the median is thirteen years. Two hundred twenty-four, or 75.6 per cent of all the rural prin-

cipals in Kansas, have had between six and seventeen years of teaching experience. There is no evidence to show that principals with long periods of experience hold better positions than those with less experience. There is a slight tendency for salaries to increase with experience up to the sixteenth year, after which there is a gradual decline. The median tenure of rural high school principals in their present positions is three years.

More rural high school principals hold the bachelor of science degree than any other degree. The percentage of master's degrees has increased with each advance in classification of rural high schools. Ninety-three per cent of rural high school principals in Kansas either hold life certificates or life diplomas; 1.7 per cent hold permanent certificates, and 5.3 per cent hold three year life certificates.



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Two Lunchroom Layouts

PLANS are shown for the compactly arranged cafeteria, kitchen and lunchroom for the consolidated school at Fort Ann, N. Y. and for a similar school at South Kortwright, N. Y.

Some desirable features of the layout of the Fort Ann School cafeteria are as follows:

1. The portable tray table can be moved to permit delivery of supplies.

2. The convenient service counter has an electrically heated hot table, cold pan and ice cream unit adjoining one another.

3. A small coffee maker is located at one end of the ice cream cabinet to provide coffee for faculty use.

4. Shelves are provided under the counter for storage. If these are mounted on wheels in small sections rather than fixed full length below the counter top, they also may be used for portable tables or trucks.

5. Metal open storage shelves for dry groceries adjoin the delivery entrance with space underneath them for garbage cans on dolly trucks.

6. The three pieces of mechanical

equipment—peeler, small hand slicer and small table mixer—are recommended if funds will permit. The peeler will pay for itself in the lowering of waste. The slicer permits the serving of uniform portions of hot as well as of cold meats and fish, thus reducing waste. It may be used, too, in the preparation of vegetables, such as coleslaw and salads. The mixer improves the quality of many dishes and permits variety in preparation. These three items will cut down on the number of kitchen employees required.

7. The refrigerator adjoins the cold section of the serving counter.

8. The range is conveniently located with respect to the preparation table.

9. The arrangement of the serving counter permits the lunchroom to be closed off from the kitchen and used as a music room during school hours.

A similar layout is provided in the

South Kortwright School except that the arrangement of the serving counter is slightly different and it has been possible to include an entrance for delivery of supplies.

The plans and equipment of the two cafeterias were designed by C. A. Clark, architect of Cortland, N. Y.

Specifications for several items of prefabricated cafeteria equipment for the Fort Ann Central School cafeteria, Fort Ann, N. Y. were:

Cafeteria Serving Counter

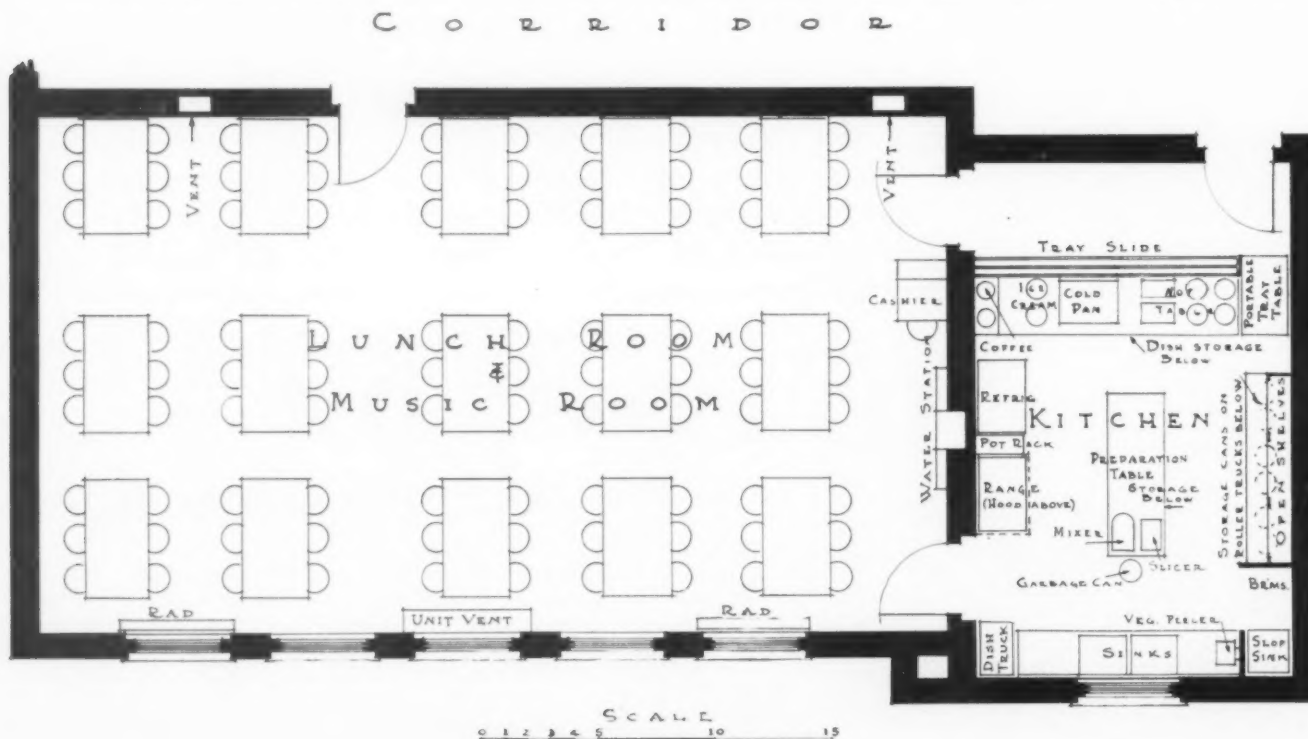
Dimensions: Approximately 13 feet 6 inches long by 32 inches wide by 36 inches high.

Top: Entire top constructed of 16 gauge stainless steel 18-8 No. 4 finish with all edges flanged down 2 inches and back $\frac{1}{2}$ inch on front and ends, and down $1\frac{1}{2}$ inches on rear, corners welded, ground and polished smooth. Top cut out for and fitted with equipment hereinafter specified.

Frame: Framework constructed of $1\frac{1}{2}$ by $1\frac{1}{2}$ by $\frac{1}{8}$ inch angle iron top and bottom frame, with $1\frac{1}{2}$ by $1\frac{1}{2}$ by $\frac{1}{8}$ inch angle iron corners and intermediate uprights, with 1 by 1 by $\frac{1}{8}$ inch angle iron continuous shelf frames. All framework to be welded, finished with Valdura aluminum.

Legs: Entire counter shall be mounted upon 6 inch high cast iron

Arrangement of lunchroom and kitchen at the Fort Ann School.

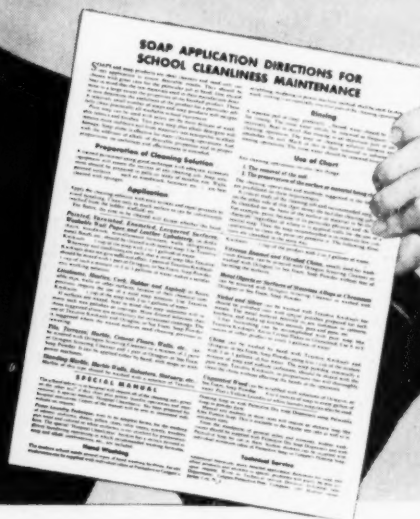


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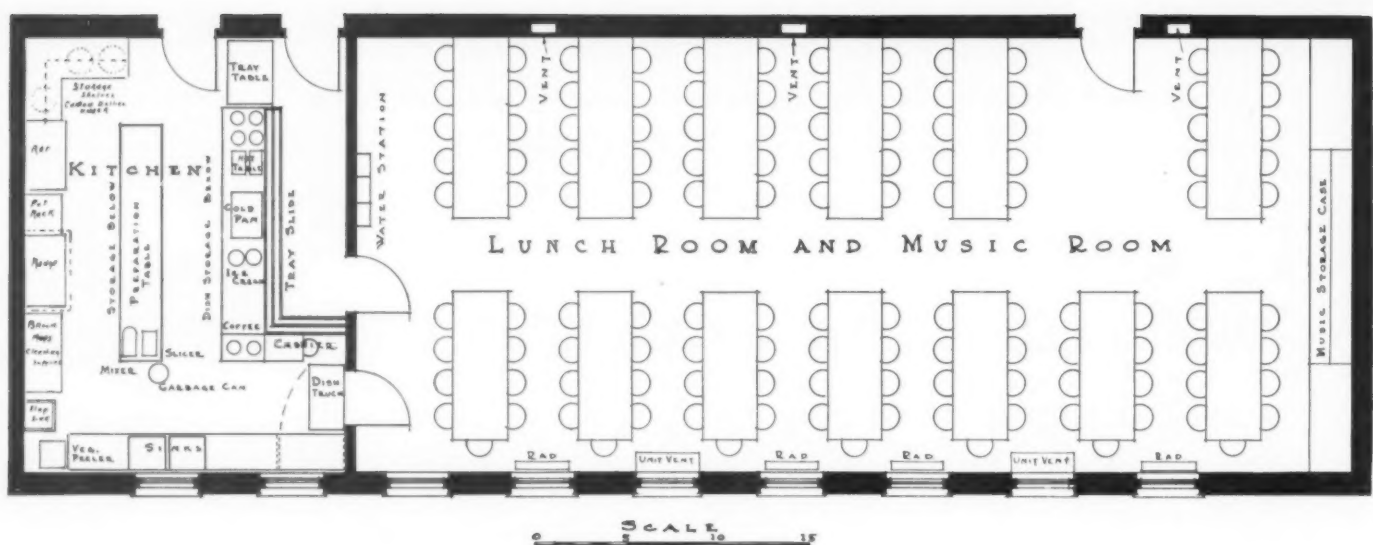
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Plan of another consolidated school cafeteria in New York State.

adjustable legs about 42 inches off center. Front and end legs to be porcelain enamel to match color in counter panels. Rear legs to be primed and sprayed with three coats of same color lacquer (color to be selected).

Body: To be enclosed along the entire front and both ends with 20 gauge galvanized iron, faced on the exterior with 18 gauge fused on porcelain enamel steel panels (color to be selected by the architect), held in place with pilasters and trim of 22 gauge 18-8 No. 4 finished stainless steel veneered over 2 by $\frac{1}{8}$ inch band and angles with concealed bolt construction.

Shelves: The rear side of the counter is open and is to have two 18 gauge removable galvanized iron shelves counting the bottom as one, with edges turned down 1 inch on all sides, with corners welded and dressed smooth to fit into angle iron shelf supports heretofore mentioned. There is to be a $1\frac{1}{2}$ inch opening between these shelves and the face of the counter to allow for cleaning.

Tray Slide: Along the entire front of the counter there shall be installed a three bar tray rail constructed of 1 inch O. D. polished stainless steel tubing, supported on 12 inch cast white metal brackets with stainless steel and caps or fittings. Brackets spaced about 42 inches off center and to be securely fastened to pilaster trim on counter front with stainless steel bolts.

Hot Table: To be approximately 46 inches long by 24 inches wide with openings cut out for and furnished with two No. S-165 seamless, stainless steel meat pans, $16\frac{3}{4}$ inches by $9\frac{7}{8}$ by $2\frac{1}{8}$ inches, and four No. S-08 $\frac{1}{2}$ inch seamless, stainless steel vegetable insets of $7\frac{1}{4}$ quart capacity to fit $8\frac{1}{2}$ inch opening and to be complete with spun stainless steel lift covers. Underside of top between all openings is to be reinforced with V-shaped 14 gauge stainless steel channels welded in place. Dry heat pan is to be constructed of an inner shell of 20 gauge stainless steel and an outer shell of 20 gauge galvanized iron with 1 inch

thick magnesia insulation on bottom and four sides. Each set of two insets is to be heated with a 500 watt electric heating element, and the meat pans with a 500 watt electric heating element. The heating elements are to be hooked up with thermostatic Wilcolator Dial heat control, together with an on-and-off switch.

Plate Space: Insets are to be put in steam table top so as to leave a 6 inch wide 14 gauge stainless steel space between the insets and the rear of the counter to act as a serving board. Under this top shelf there shall be a dish storage shelf, which is to slope from the back toward the front so stacks of dishes will remain in place without sliding.

Cold Pan: To be 24 inches long by 30 inches wide by $1\frac{1}{4}$ inches deep (inside measurements), located in counter top where shown on plan. Outer shell to be constructed of 18 gauge galvanized iron with 2 inch thick government tested sheet corkboard on the bottom and four sides, with all joints thoroughly odorless hydrolined. Inner shell is to be constructed of 16 gauge polished stainless steel depressed approximately $1\frac{3}{4}$ inch. The top and edges are to be integral and made of one piece of metal with depression true and even. The front and back edges of the top shall be formed to line up of $\frac{5}{8}$ inch O.D. tinned dehydrated copper tubing, not less than 60 feet long. The entire coil shall be soldered to the under side of the stainless steel depressed top. After the coil has been properly soldered to the top, the entire coil should be imbedded and sealed in waterproof corkboard. Top to be fastened down with concealed construction.

Compressor: One air cooled compressor with one-fifth horsepower motor. To be securely mounted under counter adjacent to cold pan, and to be complete with thermostatic expansion

valve, shut off valves, tubing and other parts necessary to make a complete and satisfactory installation. The compressor to be completely installed with free service guaranteed for one year from date of installation.

Work Table

Dimensions: Four feet long by 30 inches wide by 36 inches high.

Top: Entire top constructed of 16 gauge 18-8 stainless steel No. 4 finished with all edges $1\frac{1}{2}$ inch radius rolled having bull-nosed corners, welded, ground and polished smooth.

Frame: One and one-quarter by $1\frac{1}{4}$ by $\frac{1}{8}$ inch angle iron frame welded to the under side of the table top which, in turn, shall be supported on four 1 inch iron pipe legs with side outlet rail fittings, flanges and cross rails of the same size pipe and having white metal adjustable bell feet. Resting upon the cross rails shall be an 18 gauge galvanized iron under shelf, flanged down to conceal the cross rails with the corners welded and dressed smooth and having holes punched through for the legs. Under the table top there shall be one 20 gauge galvanized iron drawer 24 by 24 by 5 inches deep running on angle iron slides and roller bearings with the front veneered with polished stainless steel and having a white metal drawer pull.

Finish: The entire exposed framework shall be finished with three coats of aluminum.

Hood

Dimensions: Thirty-nine inches deep by 42 inches wide by 24 inches high.

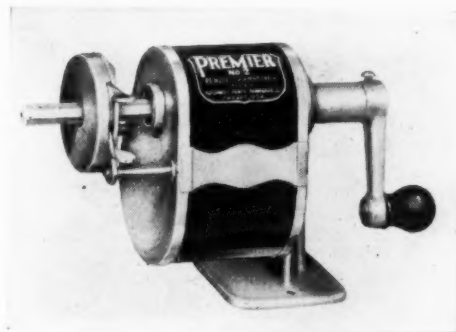
Construction: Shall be constructed of 22 gauge polished stainless steel with the bottom edge forming a condensation gutter and reinforcing all sides with $1\frac{1}{2}$ by $1\frac{1}{2}$ by 16 inch gauge stainless steel angle. It shall have rolled front and ends with the back squared against the wall and shall have a vent opening of proper size at location, to be connected to the building duct. Shall be fastened on the back at the wall with expansion bolts at a point approximately 6 feet 2 inches above the floor.

EVER THE LEADER

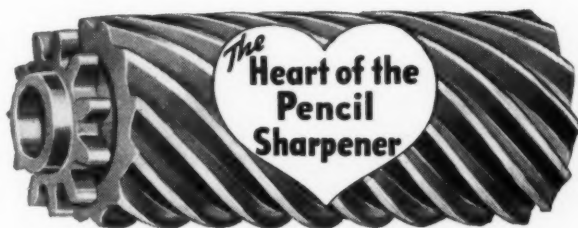


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Health Program Centers on Food



All children wash their hands thoroughly before going into the school cafeterias at Greensboro, N. C. The teacher gives the pupil health information in the classroom and supervises its practice in the cafeteria.

ELOYSE SARGENT
MILNER

his everyday life. These rules, which are a part of the school day, are practiced conscientiously until the child develops a feeling for a definite health routine.

Proper diet, it is emphasized, is of little value unless it is accompanied by sufficient sleep and rest. Often parents and teachers underestimate the importance of sleep and rest in the health and development of the growing child. When the child learns how much sleep and rest he needs to reach his best development, he will more readily accept a regular bedtime hour.

A good night's rest will lead to a better morning meal. A child may be aroused in time to have an unhurried breakfast before starting off to school. Our health program builds this type of background for classroom discussions and practices. The different meals are approached through the value of the individual food materials and the importance of their balanced combinations.

Before deciding what constitutes a good breakfast, the classes discuss the value of milk in the diet and the contribution of fruit to good health. Then the pupils are ready to study the proper combinations for breakfast and the importance of this meal in the day's program.

Likewise, the lunch unit is built through discussions of vegetables, hot food and sweets. When lunch is considered, the children know why they should drink milk, eat a hot food, include a green vegetable, salad or fruit. They learn the wisdom of eating a substantial food followed by a light simple dessert.

After the discussions have been in progress a number of weeks, there is general improvement in the selection of food from the cafeteria counter. It is gratifying to see the increasing

THE present and future health of the school child depends greatly upon the type of food he eats. His scholastic progress and behavior likewise are measured by his diet. When there are between 4500 and 6000 children eating daily in the school cafeterias, as at Greensboro, N. C., the responsibility for guidance in food selection for a large group cannot be assumed lightly.

The menus of the various cafeteria units include food of the quality and kind that are necessary for proper growth and development of the school age boy or girl. Hot nourishing food, simply prepared, is the watchword of the Greensboro cafeteria system. Highly concentrated foods and highly seasoned dishes are excluded from the counters. Candy, soft drinks, cheap pies and cakes are not sold within the school area.

Even when food to fulfill the protein, carbohydrate, fat, mineral and vitamin requirements is available, there is a need for information on what constitutes a proper diet and a satisfactory health program. The

health program needs to be practical and usable. The child requires vital, significant material on health and nutrition. School textbooks on health often sacrifice this simple yet important information for the story to be told.

It is difficult for the cafeteria manager to know the best way to work with the individual child. The teacher has studied each pupil as an individual. She presumably knows how to obtain the best work from each. Because of this relationship our health program begins in the classroom and carries over into the cafeteria. The teacher gives the pupil health information in the classroom and supervises its practice in the cafeteria.

Although diet is the most important, other factors that influence the health of the school child need consideration. Correct habits of sleep and rest, outdoor exercise, cleanliness, elimination and dress are necessary for the proper growth of the school age child. The child learns simple rules of health that he may apply in

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selection of green vegetables, fruit, salads and milk. Many children learn to eat foods that have not been included in their diet before.

Every Greensboro public school child who does not have written permission to go home for lunch eats his noon meal in the school cafeteria. This is true whether he buys his entire lunch or brings it from home or

grade that has been best mannered receives a token to keep in the classroom until the following day. These tokens are in keeping with the various seasons and holidays and create enthusiasm and interest among the children.

For the child with a limited lunch allowance, a plate lunch is offered each day. These combinations sell

tents are examined and his supplementary dish is selected in consideration of his lunch from home. If a child does not have money to buy his lunch, he learns the type of lunch he can bring from home that will fulfill his food requirements. There is no discrimination between the cafeteria patron and the child who eats a home lunch. Both receive a napkin and a place to eat at the table.

To complete a well-balanced daily diet, the children are taught to consider the dinner unit as a meal that will round out the necessary food values for the day.

Some gratifying results have come from our health program. One first grade girl, before she had milk at lunch time, was a listless, unresponding pupil who was to be retained in her grade another year. After drinking milk for a week, there was a noticeable change. A short time later she had responded to her school work so well that she was promoted to the second grade. It is a well-known fact that health and scholastic progress are closely linked, but such vivid examples distributed here and there over a school system make the fact real and vital.

The children are interested in health. They draw posters in their art classes to illustrate their health studies. Two first grade classes established food stores in their classrooms. In these stores only food that was good for growing boys and girls was displayed. The children gained invaluable help from the project.

The English lesson is being used as a means of teaching health with health subjects as theme titles. In many other ways the instructors include health teaching as an integral part of their school day.

The Greensboro health program is in its infancy. For it to become well-established requires patience and time. The school health nurses are working along with this program. The weights and measurements of the children are being carefully checked as an index to the value of health teaching.

Just one listless, undernourished, unhappy pupil who becomes an interested, well-nourished, happy-dispositioned individual is reward of the finest type for any effort in promoting such a program.



Pupils keep the cafeteria clean by returning their trays to the dishwashing room. A regulated lunch hour prevents the nervous excitement that results from an unguided mealtime. The social training is valuable.

supplements it from the cafeteria counter. The social training the children receive during mealtime is invaluable. Good manners are discussed and practiced. The child learns to eat properly; this includes correct mastication of food. A regulated lunch hour prevents the nervous excitement that results from an unguided lunch period. The child's digestion is aided by calm surroundings. This desire for a properly conducted mealtime carries over into the home.

Some of the schools make a game of the noon hour. The children assume the responsibility for the conduct and manners of the various classes. When all of the children have been served, grace is said. Announcements are made by the pupils. At the end of the meal hour, the

for 10 cents. They always include $\frac{1}{2}$ pint of milk as a beverage. Examples of the plate combinations are:

I

Macaroni and cheese
Stewed tomatoes Turnip greens
Cornstick

II

Meat and biscuit roll
Mashed potatoes Buttered cabbage

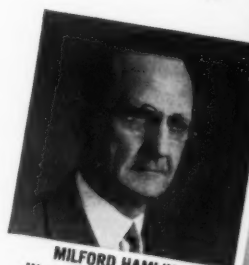
III

Salmon croquette
Buttered carrots Shredded lettuce
Bread

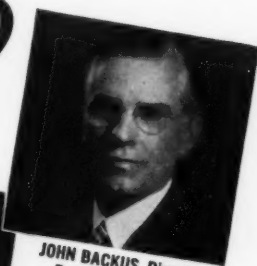
These plate lunches are popular. The child is encouraged to drink milk and does so more readily if he receives an attractive plate with a slightly better "bargain" in food.

The child who has only 5 cents to spend is not neglected. His lunch box is opened by the teacher, the con-

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Vol. 23, No. 2, February 1939

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"Candid" Shots on Safety

CHARLES W. HOFFMAN

ONE of the fields to which candid photography is applicable is safety teaching. The facility of printing candid camera pictures on film strips for motion picture projection enables presentation of a series of still pictures for study. Enlarged prints of candid photographs make excellent poster material for class review.

Another outstanding advantage of candid camera photography is its inexpensiveness when the cost is compared with cameras that were sold prior to the advent of the candid camera.

Some schools have formed candid camera clubs for encouraging the application of this type of photography to home or school activities. Successful photography will depend, to a large extent, on a thorough understanding of the construction and manipulation of the candid camera to be used.

Accurate Shutter Speeds

The candid camera is like any ordinary camera. It is simple to operate and necessitates only one "loading" for approximately 50 exposures on 35 mm. motion picture film. Shutter speeds are fairly accurate and may be set for 1/100 second, 1/50 second or 1/25 second with appropriate settings of the diaphragm opening, such as F/16, F/11, F/8 and F/6.3.

Time exposures and bulb exposures, which require the use of a tripod, are used mostly for indoor pictures. An appropriate sighting device, which requires no focusing, is generally fitted to the camera. The instruction booklet supplied with the candid camera should be carefully read and the directions followed.

When a miniature camera is available, a highly sensitive film should be used and the "loaded" camera kept on hand at all times. Highly sensitive film is recommended because lighting may vary considerably and may not be sufficient for ordinary sensitized films. The instruction booklet supplied with these

films should be read carefully and the recommended procedures for picture-taking, development and printing adopted.

Begin taking pictures, particularly in regard to safety, in the home, where safety should be stressed most. Many interesting and varied subjects may be found there. A younger brother or sister is an excellent subject. Such candid pictures may not only provide a source of enjoyment but also may contribute valuable pointers toward the formation of safety habits. A safety survey might be made of the home with a view to removing possible causes for accidents to children. The increasing number of injuries received in the home would justify the expenditure of a few dollars in taking pictures of hazards that are likely causes of injuries.

Consider play time as a valuable time for getting suitable subjects. When one is at play the mind is not generally intent upon possible ways of preventing injuries. The subjects, too, are then the best because they are relaxed and opportunity for realistic pictures is unlimited. The expression is not forced but is often natural and unstrained. Such subjects as children playing in the streets, climbing fences, throwing snowballs, playing "tag," building a bonfire or playing "cops and robbers" provide varied candid pictures for safety teaching.

If a beginning is made at school where activity is paramount, here, as in the home, the teacher with a knowledge of photography and a desire for stressing safety has unlimited opportunity for taking pictures. Safety factors in sports, in the science laboratories or in the halls are important sources for pictures.

Make a safety survey of your school building. Permission was obtained from the board of education, Palmyra, N. J., and P. R. Jones, supervising principal, to conduct a

safety survey of the Palmyra High School by means of a candid camera. The pictures were to be taken with a view to eliminating the various hazards that might appear in the pictures. Later a positive film was made and shown to the board of education and principal and their subsequent recommendations were carried out. The student council of the high school also was shown the pictures and the pupils were given an opportunity to cooperate in checking possible causes of injuries.

Permits Detailed Study

After the pictures have been taken, positive films may be printed for projection purposes from the negative strips. In order to project these for class study or group work, a still-film projector or slide-film projector is needed. In safety teaching it is essential that each picture be retained on the screen for detailed study. The projector enables the teacher to do this. There is also less eyestrain when the picture is retained for a time.

In construction the still-film projector or the film-slide projector is, in general, the same as any other standard projector using 35 mm. motion picture films. The individual pictures on this film, called "frames," are projected one at a time by the turn of a lever.

Data can be supplied for each picture by the teacher making the pictures. The effectiveness of the pictures, then, will depend upon the way in which the pictures are presented. It may be advisable to observe a unity of thought throughout the whole series of pictures. A story may be interwoven with them in order to stimulate and to enhance interest. Success with this program will depend on the enthusiasm, forethought and ingenuity of the instructor and camera man as well as upon the manipulation of the candid camera and the choice of subjects.



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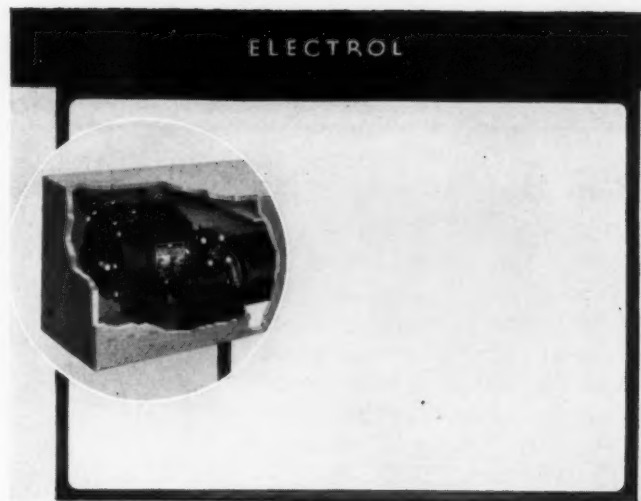
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BETTER PLANT PRACTICES

More About Towels

To bring those readers up to date who may have missed last month's discussion of toilet paper and towels, Walter McLain, secretary, board of education, Ottumwa, Iowa, pointed to an average cost of 12 cents per pupil for towels: 8 cents per pupil in the grades, and 20 cents per pupil in the high school.

This month, Arthur B. Gleason, clerk, board of education, Lockport, N. Y., joins the discussion. The cost of paper towels per pupil in Lockport, he reports, is about twice as much in the high school as it is in the grades. "Our last purchase," he says, "would make this cost 10 cents per pupil in the high school and 5 cents in the grades."

They use approximately 200 cases of towels each year in Lockport. Some 1600 pupils in the high school use 100 cases, and in the grades 3000 children use the other hundred. "The type of towel used," Mr. Gleason explains, "is a single fold, size 10½ by 11¼ inches, having a basic weight of not less than 32 pounds per 480 sheets, 24 by 36.

At Freeport, N. Y.

Walter C. Hawkins, superintendent of buildings, board of education, Freeport, N. Y., finds that his figures on towel costs are at variance with Mr. McLain's. In the grades, it is \$.1012, and for the high school, \$.0825. Thus the average per pupil cost is \$.0922. He adds, "This may be due to the fact that we paid on bid \$1.97½ per case for 3750 towels, basic weight 32 pound stock."

Costs \$.129 per Pupil

In Kenmore, N. Y., there are nine schools altogether: one senior high, one junior high and seven elementaries. Total pupils enrolled are 6268. During the year 1937-38, 398 cases of towels were used, sizes 10½ by 11¼, or 1,492,500 towels. The total cost was \$810.15, according to Kenneth O. Irvin, business manager, or \$.129 per pupil.

Now let's examine these figures broken down into junior-senior high schools and elementary schools. The

number of children enrolled in junior and senior high schools was 2250. They used 175 cases of towels, or 656,250 towels, at a total cost of \$353.75, or \$.15 per pupil.

The number of children enrolled in the elementary schools totaled 4018. These used 223 cases, or 836,250 towels, at a total cost of \$456.40, or \$.11 per pupil.

"Our experience with the single fold type of towel has been the best," Mr. Irvin states. "We believe that if we bought the roll type of towel the school building would be wrapped in paper towels."

At this point Pete Keish of the board of education, Campbell, Ohio, is heard from. Mr. Keish gives his paper towel costs at \$.029 for the elementary school, and \$.049 for the high school.

As to Specifications

Paper towels shall be of two types, according to the following specifications of the Federal Standard Stock Catalogue:

Workmanship. The towels shall be so constructed that they will not disintegrate rapidly when being used and absorbing water. Towels shall be well closed, free from lumps, slivers, dirt, breaks and wrinkles, and shall contain no holes. Perforations must be complete and regular in rolled towels, and folded towels must have uniform folds.

Towels shall be in rolls, with each towel perforated so as to be easily torn from the roll at the perforations only; or in packages with towels folded and/or interlocked to feed satisfactorily from towel-dispensing cabinet, as specified in invitation for bids.

Size. Length, 13 inches; width, 10¾ inches; tolerance, plus ¼ inch and minus ⅛ inch.

Stock. The towels shall be composed of clean, long fibers, reasonably free from lumps and shives.

Odor. The towels shall have no disagreeable odor when either wet or dry.

Finish. The towels shall be reasonably soft, have a medium rough surface, such as produced by crêpeing or embossing.

Towels, Paper, Type A.—Tensile Breaking Strength. Minimum each direction: 1.7 kilograms. **Absorption.**—

Maximum time after heating one hour at 100°C., 50 seconds.

Towels, Paper, Type B.—Tensile Breaking Strength. Minimum each direction: 1 kilogram. **Absorption.**—Maximum time after heating one hour at 100°C., 125 seconds.

Tests for Compliance.—General. Not less than five towels, each from a different roll or package, shall be tested, and the average of the test results shall be compared with the requirements.

The test specimen for the tensile test shall be 15 millimeters wide and 100 millimeters between the jaws of the tester.

Absorption.—Place one thickness of the towel on a 4 mesh wire screen. Fill a 1 milliliter measuring pipette with water (25°C.), hold at an angle of about 30 degrees with the horizontal, the tip being very near the surface of the paper, and allow 0.1 milliliter of water to flow on the towel. While the water is flowing, let the tip of the pipette remain in the drop as it forms on the surface of the towel. The absorption is the time in seconds from the contact of the water with the towel until the drop is completely absorbed, as indicated by no further reflection of light from it. The average of 10 tests, five on each side of the towel, shall be reported as absorption.

Heat Treatment. The sample shall be exposed for one hour in an oven controlled to maintain a constant temperature of 100°C. (= 1 degree) and equipped with such means of circulating air that the temperature is uniform throughout the interior of the oven. The sample shall be suspended in the oven in such a way as to allow free access of air to all parts of it.

Three Suggestions

In a study made on standards for paper towels, the Bureau of Standards recommended B type towels for use in public places, the reason being that such towels are usually given careless usage and the B type gives adequate service for such usage.

Several brands of towels were compared by use in the school system of Girard, Kan. The results indicate that roll towels were from one-fourth to one-half as expensive as cut towels.

The San Bernardino schools have found that the size of towels known commercially as "junior fold" are the most economical of the cut towels.

PPROMPT care is important in preventing infected wounds. Even minor wounds may become infected when antiseptic treatment is delayed. Children and adults report injuries promptly when Mercurochrome is used, because treatment is not painful.

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After a thorough investigation of the evidence for and against at the close of the last period of acceptance, the Council on Pharmacy and Chemistry of the American Medical Association again reaccepted (1935) **MERCUROCHROME, H. W. & D.**
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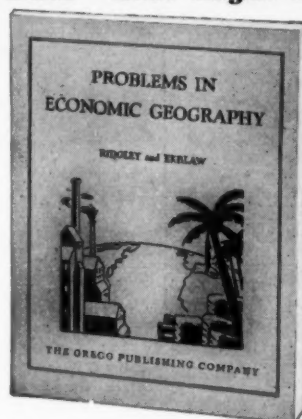


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News in Review

School Health, School Plant

Annual school health tests have become so routine that only glaring physical defects and common contagious diseases are detected.

This conclusion is reported by a subcommittee of the recent inquiry of the New York state board of regents. The committee, headed by Dr. C.-E. A. Winslow, professor of public health at Yale University, reports other serious defects in the health program outside New York City other than the hasty and perfunctory type of physical examinations. These include the existence of many ill-lighted, ill-ventilated and otherwise insanitary school buildings, inadequate instruction in health and physical education, lack of a mental hygiene program and inability to dismiss emotionally unbalanced teachers.

It is recommended that the annual physical examination be abolished in favor of a new law to make thorough medical examinations compulsory for all children at three intervals in their school careers.

The first section of the study, devoted to conditions in school buildings, vigorously attacks the system of ventilation prescribed by state law which requires that all school buildings be fitted with mechanical ventilation systems capable of producing 30 cubic feet of fresh air a minute for each pupil. The committee report states that the simple process of raising and lowering windows fitted with slanting boards to prevent drafts is superior to the present New York ventilating plan.

The report also notes that in 88 per cent of schools the pupils study with less light than the 10 foot candles set as a minimum for illumination. Sixty per cent of the buildings have no seats that can be adjusted to postural needs of pupils, and "ordinary rules of sanitary decency" are lacking in many schools studied.

The report advocates that a mental hygiene program originate in the schools and that physical education programs emphasize calisthenics and minor sports suitable for leisure time activities in favor of "large muscle" sports.

luncheon with the American Association of Teachers Colleges, Supervisors of Student Teaching and other organizations. The program for the luncheon is being developed by Karl W. Bigelow of the American Council on Education.

Doctor Thorndike to Speak

Dr. Edward Lee Thorndike will be the guest speaker at the annual dinner of Kappa Delta Pi at the Hotel Cleveland, Cleveland, February 28. His subject will be "Education as Cause and as Symptom." Because of the significance of the address, the society is opening this meeting to nonmembers of the fraternity. A general invitation is extended to delegates attending sessions of the A.A.S.A.

Mathematics Council

"Making Mathematics Teaching Function" will be the theme of the twentieth annual convention of the National Council of Teachers of Mathematics when it meets in Cleveland, February 24 and 25. Among the speakers will be John W. Studebaker, W. W. Beatty, M. L. Hartung and F. R. Moulton.

School Secretaries to Confer

The Eastern States Conference of the National Association of School Secretaries will be held in connection with the A.A.S.A. in Cleveland, February 25 and 26.

Progressives in Detroit

The Progressive Education Association will hold its annual national conference February 22 to 25 at the Book-Cadillac Hotel, Detroit, just prior to the meeting of the American Association of School Administrators in Cleveland, and is so planned that delegates may conveniently attend both conferences.

The sessions will open on Wednesday, February 22, with a unique series of 23 all-day consultation conferences, membership limited to 25 each, in which resource leaders selected for their experience in special fields will confer with others on problems of educational significance.

General sessions of the first day will consider education and the international scene with Harold Rugg, Bertrand Russell and Harold Laski as speakers, together with the famous movies on education by Julian Bryan.

The second day will be given to visitation of Michigan schools, continua-

MEETINGS

Joint Luncheon

The National Society of College Teachers of Education, which is meeting in Cleveland February 25 to March 1, will open its program with a joint

tion of the consultation conferences and to general sessions on the part parents play in progressive education. Outstanding speakers at these sessions include Mrs. J. K. Pettengill, Paul Misner, Alice V. Keliher, Caroline Zachry and Sidonie M. Gruenberg.

An important event of the conference will be the presentation on Thursday afternoon of the report of the Committee on the Philosophy of Progressive Education, the first official pronouncement of its kind issued by the association.

"Just What America Is" will be considered Thursday evening by James Truslow Adams, for New England; Paul Green, for the South; T. V. Smith and William Allen White, for the Midwest.

The forenoon conference on Friday will be devoted to basic considerations in the educational program for children, adolescents and communities, listing among the speakers, Paul Hanna, Homer P. Rainey, Aubrey Williams, John W. Studebaker, Eduard C. Lindeman and Mr. White.

On Thursday afternoon the general session meeting will be held jointly with the John Dewey Society under the chairmanship of William Heard Kilpatrick. A dinner meeting at which Charles A. Beard and James Truslow Adams will speak will close the day.

The final session Saturday afternoon will present Phillip La Follette speaking on "Resources for American Life" and Walter Grapius on "New Horizons."

Rotary Luncheon

The School Masters' Rotary Club will hold a joint luncheon with the Cleveland Rotary Club Wednesday noon, March 1, at the Statler Hotel, Cleveland. This will be the twenty-second annual luncheon of this organization, which generally draws an attendance of from 800 to 1000 educator Rotarians.

Walter D. Head of Montclair Academy, Montclair, N. J., chairman of the aims and objects committee of Rotary International, will be the speaker. Supt. A. S. Chenoweth of Atlantic City, N. J., is president of the club, and S. T. Neveln, superintendent at Austin, Minn., is secretary-treasurer.

Tickets for the luncheon will be on sale at the convention headquarters and at The NATION'S SCHOOLS' booth.

Youth Guidance Is Theme

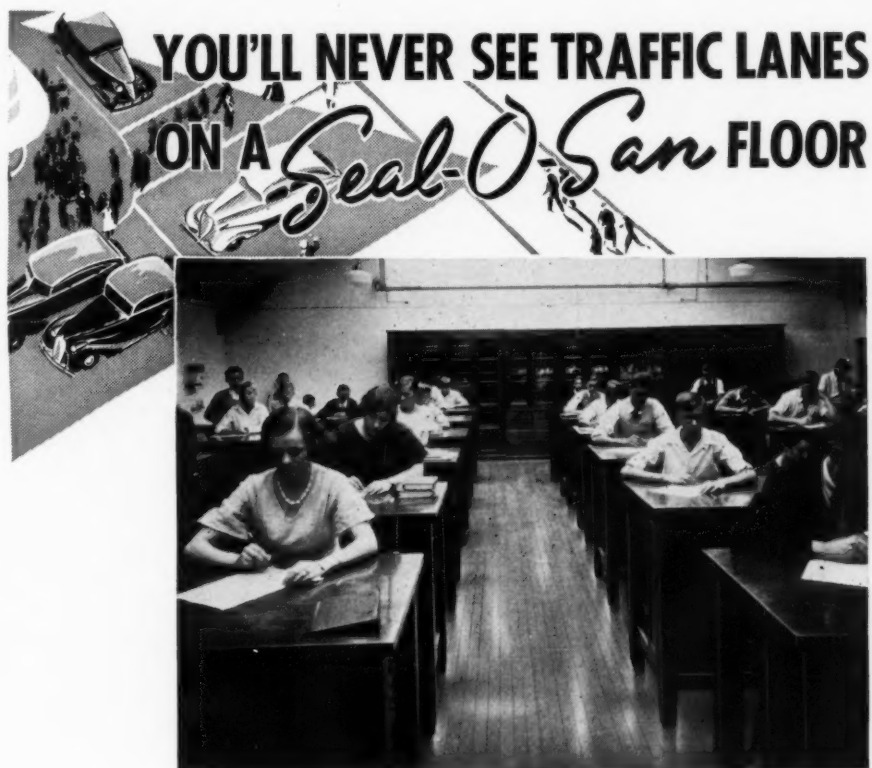
The need and methods for guidance and adjustment of young people to their work and life objectives will be the central theme for the annual convention of the American Council of Guidance and Personnel Associations

in Cleveland February 22 to 25. The council is composed of a number of national or regional guidance and personnel associations. It will meet during the three days following an all-day program under council auspices on February 22. Member associations holding annual meetings on February 23, 24 and 25 are the National Association of Deans of Women, American College Personnel Association, Personnel Research Federation, Teachers

College Personnel Association, National Vocational Guidance Association and the Western Personnel Service.

Speech Conference

The West's laboratory for the development and presentation of new speech methods in education, the Rocky Mountain Speech Conference, will be in session from February 9 to 11 at the University of Denver. The theme will be "Control of the Business Cycle."



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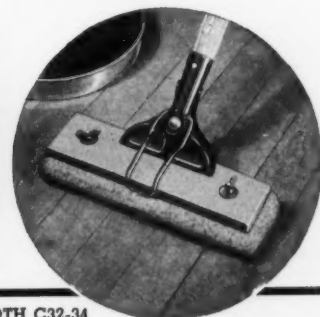
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On the Air During February

The following programs of particular interest to school people are arranged by the Columbia Broadcasting System and the National Broadcasting Company. All programs are listed in Eastern Standard Time. Watch listings for your local outlets.

Daily

12:30-1:15 p.m.—National Farm and Home Hour (NBC Blue).¹

Sunday

10:30-11:00 a.m.—Music and American Youth, programs given by public school children from cities all over the country (NBC Red).

12:30-1:00 p.m.—University of Chicago Round Table (NBC Red).

1:00-2:00 p.m.—Great Plays, masterpieces of the drama (NBC Blue).

Feb. 5—Richelieu.

Feb. 12—The Octoroon.

Feb. 19—Redemption.

Feb. 26—The Doll's House.

2:00-2:30 p.m.—Americans All, Immigrants All, sponsored by the U. S. Office of Education. Dramatization of the contributions which the successive waves of immigrants have brought to the United States, written by Gilbert Seldes (CBS).

3:00-5:00 p.m.—New York Philharmonic Symphony Orchestra, John Barbirolli, conducting (CBS).

4:30-5:00 p.m.—The World Is Yours, dramatic series sponsored by the Smithsonian Institution (NBC Red).

6:00-7:00 p.m.—New Friends of Music concerts broadcast from Town Hall, New York, continuing until February 19 (NBC Blue).

7:00-7:30 p.m.—The Peoples' Platform, dinner guests of Prof. Lyman Bryson of Columbia University from all walks of life talk over current questions (CBS).

8:00-9:00 p.m.—This Is New York (CBS).

10:30-11:00 p.m.—Headlines and Bylines. Comments on world affairs by H. V. Kaltenborn, Ralph Edwards (CBS).

Monday

2:00-2:30 p.m.—Adventure in Reading (NBC Blue).

2:30-3:00 p.m.—American School of the Air, "Frontiers of Democracy," vocational guidance. A series of programs based on the report of the National Resources Committee dealing with trends in industry and population (CBS).

3:00-3:45 p.m.—Rochester Civic Orchestra (NBC Blue).

5:45-6:00 p.m.—"New Horizons," sponsored by the American Museum of Natural History (CBS).

6:00-6:15 p.m.—Science in the News (NBC Red).

7:45-8:00 p.m.—Science on the March (NBC Blue).

10:30-11:00 p.m.—National Radio Forum (NBC Blue).

Tuesday

12:45-1:15 p.m.—Music Makers, conducted by Dr. Joseph E. Maddy, Elementary, 12:45-1:00 p.m.; advanced, 1:00-1:15 p.m. (NBC Red).

1:30-1:45 p.m.—General Federation of Women's Clubs, consumers' program (NBC Red).

2:00-2:30 p.m.—Science Everywhere. Junior science. Elementary, 2:00-2:15 p.m.; advanced, 2:15-2:30 p.m. (NBC Blue).

2:30-3:00 p.m.—American School of the Air, "Music and Its Friendly Arts." Columbia's Symphony Orchestra and noted commentators in a musical series correlating music with the dance, poetry and prose, drama, opera and architecture (CBS).

2:30-3:00 p.m.—NBC Music Guild (NBC Blue).

5:45-6:00 p.m.—Of Men and Books. Prof. John T. Frederick reviews books and interviews guest authors (CBS).

Wednesday

2:00-2:30 p.m.—Your Health, sponsored by the American Medical Association (NBC Blue).²

Feb. 1—Preventing Epidemics.

Feb. 8—Avoiding Arthritis.

Feb. 15—Healthy Hearts.

Feb. 22—Cancer Can Be Cured.

March 1—Diabetes.

2:30-3:00 p.m.—American School of the Air, "New Horizons," science and geography. Roy Chapman Andrews, director, American Museum of Natural History, and other noted explorers in talks and dramatizations of scientific and geographic expeditions (CBS).

5:15-5:30 p.m.—So You Want to Be—Possible careers for high school pupils (CBS).

5:45-6:00 p.m.—Exploring Space, sponsored by the American Museum of Natural History (CBS).

6:00-6:15 p.m.—Our American Schools, dramatizations tracing growth and development of the nation's school system, Belmont Farley, narrator (NBC Red).

6:30-6:45 p.m.—Music Is My Hobby (NBC Red).

9:30-10:00 p.m.—Wings for the Martins. What modern education has to say on the problems of children and youth in "finding their wings." Sponsored by the U. S. Office of Education and the National Congress of Parents and Teachers (NBC Blue).

Thursday

2:30-3:00 p.m.—American School of the Air, "This Living World" (CBS).

6:00-6:15 p.m.—Operalogue broadcasts of the Metropolitan Opera Guild, designed to aid radio audiences in enjoying opera broadcasts (NBC Red).

8:30-9:30 p.m.—Rochester Philharmonic Orchestra with Jose Iturbi as conductor will be heard February 9, March 2 and 16 (NBC Blue).

8:30-9:15 p.m.—Eastman School of Music Orchestra under the direction of Dr. Howard Hanson and Paul White will be heard on February 2, 16 and 23, March 9, 23 and 30, April 6, 20 and 27 (NBC Blue).

9:30-10:30 p.m.—America's Town Meeting of the Air, George V. Denny Jr., moderator (NBC Blue).

10:00-10:30 p.m.—Columbia Workshop, experiments in drama (CBS).

10:30-11:00 p.m.—Americans at Work, interviews with workers in representative jobs, CBS adult education series.

Friday

2:00-3:00 p.m.—Walter Damrosch Music Appreciation Hour (NBC Blue).

2:30-3:00 p.m.—American School of the Air, "Tales From Far and Near," literature. Narration and dramatization of modern children's stories, with guest authors (CBS).

7:15-7:30 p.m.—National Youth Administration (NBC Blue).

10:45-11:00 p.m.—American Viewpoints program (CBS).

Saturday

10:30-10:45 a.m.—The Child Grows Up (NBC Blue).

10:45-11:00 a.m.—Florence Hale's talks, directed to parents, explaining methods of classroom procedure so that education may continue at home as well as in school (NBC Red).

11:00-12:00 noon—Cincinnati Conservatory of Music. New York Philharmonic Children's Concert alternates on third Saturday of each month (CBS).

11:00-11:30 a.m.—No School Today, a new safety program for children (NBC Red).

11:30 a.m.-12:00 noon—Milestones in the History of Music, Eastman School of Music program (NBC Red).

12:00 noon-12:25 p.m.—American Education Forum. Conducted by Dr. Grayson Kefauver, professor of education, Stanford University (NBC Blue).

12:00-12:30 p.m.—NBC Music Guild (NBC Red).

1:15-5:00 p.m.—Metropolitan Opera (NBC Red).

4:00-4:30 p.m.—College "Bull Session," unrehearsed discussion program by college students.

5:00-5:30 p.m.—"What Price America," U. S. Department of Interior program presenting the fight to regain natural resources in dramatized form.

7:45-8:00 p.m.—Lives of Great Men, Dr. Edward Howard Griggs (NBC Red).

8:30-9:00 p.m.—Original Plays (NBC Red).

10:00-11:30 p.m.—NBC Symphony Orchestra under direction of Arturo Toscanini (NBC Blue).

¹Except Sunday.

²Owing to program conflicts, there will be no Chicago broadcast of the network program. Instead, a recording of the program will be broadcast over Station WENR at 8 p.m. each Wednesday.

RADIO

A State School of the Air

Too little is done by New York State schools to utilize either the radio or the motion picture in the classroom. This conclusion was reached by Dr. Elizabeth Laine, a member of the research staff of the Regents' Inquiry dealing with the motion pictures and radio.

The fourth volume of the report, made public recently, recommends a State School of the Air, to cooperate with public schools and colleges in broadcasting classroom work. Motion pictures and radio should supplement the teacher, not displace her, according to Doctor Laine. With further research experimentation, the opportunities for using both agencies as classroom teaching aids are limitless, she adds.

It is suggested that educational films be produced that will deal with actual life problems, films that will instill "those elusive elements which form character, citizenship and goodness." It also was recommended that a central information bureau relating to films be conducted by the state department of education.

New Radio Catalog

The third edition of the catalog, "R.C.A. Victor Sound Service for Schools," has been announced by the education department of the R.C.A. Manufacturing Company. The catalog is available to teachers and school executives through distributors or directly from the company. The 32 page book is printed in two colors, is lavishly illustrated and includes extensive notes and comments explaining the application of radio, recorded music, sound motion picture projectors, transmitters, sound reenforcing equipment and electronic instruments to school purposes.

Further Mountain Centers

For the promotion of educational radio broadcasting and radio research, \$1652 has been given the University of Kentucky by the U. S. Office of Education through the W.P.A. Approximately six workers will be employed on the projects to be set up under the grant.

The outline of the proposed work includes one or two persons who will do research on material, such as the history of Kentucky and convert it into dramatic script which will be of interest and value for presentation to listeners in the radio listening centers of the

Kentucky mountains. A worker will travel through the mountain area to make an exact survey of the value of the programs that are being broadcast to the listening center groups.

The outline also will include a music director and a supervisor to organize listening groups in the backward mountain centers.

VISUAL EDUCATION

Northwest Institute

The second Northwest Audio-Visual Institute will be held at the Center for Continuation Study at the University of Minnesota, February 2 to 4. The program is planned for educators of Minnesota, Iowa, North Dakota, South Dakota, Montana, Upper Peninsula of Michigan and Wisconsin.

How Talkies Are Made

Mechanical, electrical and visual principles of modern talking movie films are depicted in a new Bell & Howell film recently released entitled "How Motion Pictures Move and Talk."

The film traces the production of a Hollywood feature release from the unperforated raw film to the eventual shipment of 16 mm. reduction sound prints in labeled metal containers. The



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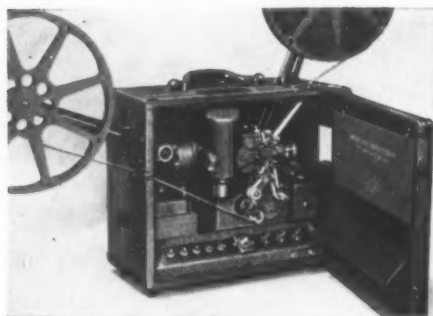
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HERE'S an asset for any school—the new, moderately priced, 16 mm. Filmosound 142. Light and compact, it is readily moved from one classroom to another. Yet it is amply powerful to serve in large school auditoriums as well.

Filmosound 142 projects both sound and silent films. It has a still-picture clutch, and a reverse switch to permit repeating sequences for emphasis. Provision for adding a microphone permits using this Filmosound as a public address system. And with a phonograph turntable it will provide music for school affairs.

Built with typical Bell & Howell precision, Filmosound 142 gives lastingly dependable service. Standard equipment includes 750-watt lamp, fast F 1.6 lens, "blimp" case for quiet operation, speaker-hiss eliminator, "floating film" protection, and "metered lubrication." Write now for complete details.

There are other Bell & Howell projectors, too, from low-cost silent film projectors to the Filmoarc for sound or silent film presentations in the largest school auditoriums.

Ask also for new list of 2800 sound-on-film reels available for rental or purchase. Bell & Howell Company, Chicago, New York, Hollywood, London. *Established 1907.*

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recording of sound on film and its reproduction are illustrated by animated drawings.

Any school can obtain the use of the film in either silent or sound for one day without charge through the distribution channels of Castle Films, Wrigley Building, Chicago, or by writing Bell & Howell, 1801 Larchmont Avenue, Chicago.

Another recent addition to the Bell & Howell 16 mm. sound film library is the first direct reduction by technicolor of a major Hollywood cartoon production. The first release is "Jolly Little Elves," a fairy tale of the poor cobbler who befriended a hungry elf and was repaid by the elfin clan until fame and wealth were his. Other titles in the series for primary school level include "Candyland," "Fox and Rabbit," "Springtime Serenade," "Three Lazy Mice" and "Toyland Premiere."

Ohio Distributes Many Films

More than 2500 reels of 16 mm. instructional motion pictures are now being distributed to Ohio schools by the visual instruction division of the Ohio State Department of Education. The division is under supervision of B. A.

Aughinbaugh, a pioneer in the visual aids movement.

"Transparent Book"

Last month the "Transparent Book," a new and unusual pictorial method of telling a story that may have important applications in education, was demonstrated to the public at the New York Museum of Science and Industry in Rockefeller Center.

The method was developed by Dr. S. Theo Jonas, Chicago dentist. It employs a book, with covers and pages of transparent plastic material, which builds up a given procedure, subject or problem in a picture sequence in such a way that each new step is projected against a background of the accumulated preceding steps. Thus, when all the transparent pages have been turned, the entire story appears through the transparent covers as a complete unit. The book is reversible, so that the reader may reverse the process and take the procedure apart instead of building it up, by turning the pages from back to front.

Doctor Jonas conceived the idea while studying dental surgery abroad. Unable to understand the language

Films for the School Screen

American History—6. Post Civil War Period

Immigration to the United States—

The important waves of immigration and the causes back of each. The European background of the immigrant is present, as well as special sections of the United States settled by the English and Dutch, the Irish and Germans, and other foreign people. The contributions immigrants have made to the foundation and development of a separate nation are indicated. 1 reel. 16 and 35 mm., silent. For rent. Society for Visual Education, Inc., 327 South La Salle Street, Chicago.

This Is America—Record of our country during the last two decades. Gilbert Seldes selected the sequences from newsreel film. Dr. Hugo Riesenfeld wrote the symphonic musical accompaniment. 55 minutes. 16 mm., sound. For rent. Bell and Howell Company, 1801 Larchmont Avenue, Chicago.

History of Aviation—A comprehensive pictorial history of aviation from the flight of the Wright brothers at Kitty Hawk, N. C., to the epoch-making flight of the China Clipper. 3 reels. 16 mm., sound. For rent or for purchase. Walter O. Gutlohn, Inc., 35 West Forty-Fifth Street, New York.

Some Famous Beginnings—First inventions in mechanical power, transportation, communication and light. 1 reel. 16 mm., silent. Motion Picture Bureau, National Council of Y.M.C.A., 347 Madison Avenue, New York.

With General Custer at Little Big Horn—Pictures of the final encounter of the illustrious soldier with the Indians in 1876. 6 reels. 16 mm., silent. Ideal Pictures Corporation, 30 East Eighth Street, Chicago.

Headlines of the Century—A presentation of the highlights of American history since the beginning of the century; showing social and economic changes of the period as well as political events: President McKinley's inaugural, Dewey at Manila Bay, the Alaska gold rush, the Boxer rebellion, Theodore Roosevelt as president, Marconi and the first wireless, Wilbur Wright's aeroplane, President Taft's inaugural, the San Francisco earthquake, the Panama-Pacific Exposition, World War, Wilson in Europe, President Coolidge's inauguration, Lindbergh's arrival in Paris, Franklin Delano Roosevelt. 6 reels. 16 mm., sound. For rent or for purchase. Films, Inc., Dept. W., 330 West Forty-Second Street, New York.

sufficiently to take notes from the lectures that accompanied the operations he witnessed, he formed the habit of making drawings of the different procedures as they were performed. One day he became aware that because of the thinness of the paper in his notebook he could see the drawing on one side of a page after he had turned it. This gave him the idea of using transparent pages and superimposing one picture on top of another to build up the complete sequence.

Visual Aids for Negroes

The Negro senior high school at Knoxville, Tenn., furnishes weekly motion pictures for three near-by Negro elementary schools with its motion picture projector.

Offer Free Loan Films

School systems may now borrow on the "free loan" basis educational sound films from Burton Holmes Films, Inc., through its distribution department, 7510 North Ashland Avenue, Chicago, it has been announced. Films are shipped express collect and may be returned express prepaid or by parcel post. Schools may use the "free loan" films for more than one day if arrangement is made with the distributor to keep the films for several showings.

One sound film that is being offered is the story of baseball, produced by the National League. The running time is 41 minutes and it may be obtained in both 16 and 35 mm. sizes.

TRANSPORTATION

Standardization Study

More than three million American school children go to school by bus. They ride in all types of buses, from homemade contraptions with canvas covers to de luxe models. Ninety thousand buses at an annual cost of \$60,000,000 travel the highways of the country transporting children to school.

Because there is no standardization of school transportation and because authorities believe there should be, the General Education Board is financing a two year study of this problem under the supervision of Dr. Frank Cyr and Dr. M. C. S. Noble of Teachers College, Columbia University. Doctor Noble has just returned from a 9000 mile trip throughout the West observing and frequently riding in all types of buses.

While the study is by no means completed, Doctors Cyr and Noble have arrived at some conclusions. Methods of operation, financing, routes and schedules, insurance, safety factors and

driver qualifications are among the phases being considered in the study. Among other things, they feel that school ownership of school buses is not only more economical but also provides higher maintenance standards than are provided by contract method of operation.

Buses are by no means the sole means of transportation. In Idaho two children climb into a basket every morning and pull themselves by pulley across a raging Salmon River gorge and then meet the school bus for the rest of the journey. Another group arrives for its education via dog sled. In Florida and Maryland boats are used.

Die in Fire After Crash

Four high school youths were burned to death near Roanoke, Ala., last month when the school bus in which they were riding caught fire after it collided with an automobile.

PUBLICATIONS

Statistics and Guidance

Statistical and economic research methods are being applied to vocational guidance by Science Research Associates, a fact finding agency in-

On Display at Cleveland

Some New Designs of HAMILTON Furniture

Stop in at our Booths D-42 and D-44 at the Cleveland, Ohio, Convention, February 25 to March 2. This display will give you a good opportunity to get the latest information on improvements in School Furniture.

The No. L-108 Instructor's Desk, shown at right, is only one example of the new pieces. The Hamilton Unit Kitchen Equipment will be on display for the first time . . . be sure to see it . . . available in both Steelwood and Steel construction.

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Designed as a national clearing house for occupational information, the new vocational advisory system is disseminating analyses of employment trends through a new monthly magazine, *Vocational Trends*, for young readers.

Supplementing *Vocational Trends* is a series of occupational monographs, issued monthly, that are devoted to a detailed consideration of a particular occupation. Additional supplementary material includes a bibliographical guide; a monthly selection and classification of the best current vocational literature; a reprint service of materials of vocational value; a speakers' bureau; a plan for community participation in a vocational program, and a research service.

Stories of Industry

A second volume of "Stories of American Industry," broadcast over the Columbia network by the U. S. Department of Commerce last year, has been published. The cost of the second series is 20 cents per copy with a discount of 25 per cent on lots of 100 or more mailed to a single address. The first series is still available at 10

cents per copy from the Superintendent of Documents, Washington, D. C.

For Pan American Day

To assist schools in planning for the observance of Pan American Day on April 14, the Pan American Union, Washington, D. C., this month is offering for free distribution program material to teachers or group leaders. A list of 22 pamphlets is available, including history, pageants and music.

ADMINISTRATION

Enrollment Triples

During the last decade the number of junior colleges has increased 36 per cent while the enrollment in them has almost tripled.

The foregoing statistics were compiled by Walter Crosby Eells, executive secretary of the American Association of Junior Colleges, for publication in the annual Junior College Directory for 1939.

The enrollment in junior colleges has increased from 136,000 students in 1936-37 to 155,000 students in 1937-38, an increase of 14 per cent for a single year. In 1929 the enrollment in junior colleges was only 54,000.

The number of junior colleges reported is 556. While many of the junior colleges are relatively small, there are 130 that have enrollments of more than 300 students each, 29 that have enrollments of more than 1000 students and three that have passed the 5000 mark. The junior college at Los Angeles is the largest with an enrollment of more than 6000. The three junior colleges of the Chicago school system have a total enrollment of more than 5300 students.

Recommends State Board

A plan for a state education board that will administer the University of Wisconsin, the seven state normal schools, Stout Institute and the state school for manual training and domestic economy, has been advanced by Gov. Julius P. Heil as a means of taking the presidency of the University of Wisconsin out of politics.

To Test Library Supervision

Beginning in February 32 Chicago elementary schools will participate in an experiment planned for the improvement of elementary school libraries. Trained teacher-librarians will be placed in 16 schools scattered throughout the city. Their work will be to

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teach reading and literature in the upper grades and also to serve as a supervisor and guide during the periods when the library might be used by children for free or leisure time reading. Sixteen other schools of comparable types of children and library facilities will operate as they do at present without a teacher-librarian.

At the beginning of the semester pupils in the sixth and eighth grades in all 32 schools will be given evaluation tests prepared by a committee of principals and teachers. Similar tests to determine the pupils' advancement will be made in the middle and end of the semester.

HEALTH

Attack on Three Fronts

Health education problems will be attacked on three fronts at the health section of the World Federation of Education Associations, which hundreds of American educators will attend next August in Rio de Janeiro, Brazil. The three fronts are: (1) the organization of teachers to promote more healthful living, (2) improved organization of health services in the school and (3) improvement in physical education curriculums, according to

Dr. Clair E. Turner, professor of biology and public health at Massachusetts Institute of Technology.

Professor Turner, who recently received leave of absence to make a world tour in the hope of building up the health section of the federation, suggests

the following remedies for deficiencies in school health programs: (1) better and more complete physical examinations by school doctors; (2) more universal application of immunization laws; (3) more general participation of parents at school examinations so that

Coming Meetings

Feb. 22-25—American Council of Guidance and Personnel Associations, Cleveland.
Feb. 22-25—National Vocational Guidance Association, Cleveland.
Feb. 22-25—National Conference, Progressive Education Association, Book-Cadillac Hotel, Detroit.
Feb. 22-25—National Association of Deans of Women, Cleveland.
Feb. 22-25—American College Personnel Association, Cleveland.
Feb. 22-25—Teachers College Personnel Association, Cleveland.
Feb. 24-25—National Council of Teachers of Mathematics, Carter Hotel, Cleveland.
Feb. 25-26—Eastern States Conference, National Association of School Secretaries.
Feb. 25-26—School Public Relations Association, Hollenden Hotel, Cleveland.
Feb. 25-March 1—National Society of College Teachers of Education, Cleveland.
Feb. 25-March 2—American Association of School Administrators, Cleveland.
March 2-4—American Association of Junior Colleges, Grand Rapids, Mich.
March 22-24—South Carolina Education Association, Columbia.
March 22-24—Mississippi Education Association, Jackson.

March 23-25—Alabama Education Association, Montgomery.
March 23-25—Georgia Education Association, Atlanta.
March 31-April 1—Representative Assembly, Michigan Education Association, Lansing.
April 3-6—American Association for Health, Physical Education and Recreation (N.E.A.) San Francisco.
April 6-8—Tennessee Education Association, Nashville.
April 8—California Teachers Association, Palace Hotel, San Francisco.
April 10-14—Association for Childhood Education, Atlanta, Ga.
April 12-14—National Catholic Educational Association, Washington, D. C.
April 12-15—Kentucky Education Association, Louisville.
April 15—Massachusetts Teachers Federation, Boston.
July 2-6—National Education Association, San Francisco.
August 6-11—World Federation of Education Associations, Rio de Janeiro, Brazil.
Oct. 16-20—National Association of Public School Business Officials, Cincinnati.
Nov. 30-Dec. 1—National Council of Teachers of English, New York City.



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Cleveland

Feb. 25 Mar. 2

needs of the child can be explained, and (4) necessity for cooperation between teacher, nurse and doctor to the end that the pupil won't slip by all three.

Two Out of 1000 Infected

Two out of every thousand college students examined are infected with syphilis, a rate that is practically the same as that of noncollege youth of the same age. These findings are incorporated in a study prepared by staff members of the U. S. Public Health Service in which 78,388 undergraduates in more than 500 American colleges were tested.

Other findings indicate about 15 per cent less syphilis among college women than among men, a difference that parallels nationwide prevalence rates by sexes. Little difference is shown between one region in the country and another for either sex or between the rates for schools with large and small student bodies.

INSTRUCTION

Hatlessness Campaign

Well aware that the prosperity of the schools depends upon the prosperity of the city's chief industry, Supt. Harold F. Dow of Danbury, Conn., has in-

augurated a plan for integrating school studies with hatting, the city's basic industry. The Principals' Council of the city has approved the project. A program has been drawn up for the various grades; awards have been announced for pupils writing appropriate slogans, the best essays and for those designing the best posters and buttons for a campaign against the custom of going bareheaded. Superintendent Dow plans to include hat educational work as a permanent part of the curriculum.

ANNIVERSARIES

Golden Jubilee

The thirty-sixth annual convention of the National Catholic Educational Association will be held during Easter week, April 12 to 14, in Washington, D. C., Rev. Dr. George Johnson, secretary general of the association, has announced. The convention will be a special feature of the golden jubilee celebration of the Catholic University of America. There will be sessions of the parish school, secondary school, college and university and seminary departments, and of the minor seminary and Catholic blind education sections. The committee meetings will be held Tuesday, April 11.

RESEARCH

One in Every Ten

In its second month, the Student Opinion Surveys of America, conducted at the University of Texas, polled an overwhelming "no" to the question: "Has any attempt been made on your campus to influence you with communism, socialism, fascism?" The poll revealed that communist and fascist propaganda reaches only one out of every ten college students in America. Ten per cent of the students in 70 colleges admitted attempts to propagandize them. Colleges along the Middle Atlantic seaboard were biggest targets while west central and southern colleges received little in the way of anti-democratic propaganda.

School Buildings in Adult Life

The trustees of the Carnegie Corporation of New York have appropriated a sum of \$5000 for conducting a study of the use of school buildings for adult education and other community uses. The American Association for Adult Education has authorized the study to be made under direction of Prof. N. L. Engelhardt of Teachers College, Columbia University.

IMPORTANT NEWS About Sound Projectors

Here is good news for educators who have hesitated to incorporate the new 16 mm. sound films in their programs because of the high cost of good equipment.

Today, Ampro announces two radically new and improved low priced 16 mm. sound-on-film projectors that open unlimited possibilities for the increased use of sound films. These are not projec-

tors "built down to a price" but basically new designs that provide quality sound projection at "within the budget" prices.

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NAMES IN NEWS

City Superintendents

I. E. STUTSMAN, for five years superintendent of schools, St. Joseph, Mo., on March 15 will succeed J. C. COCHRAN as superintendent of schools at San Antonio, Tex. Mr. Stutsman was given a contract until June 1942 at a salary of \$7500 annually.

MRS. THELMA SANDS has been named acting superintendent of schools at Galena, Ohio, succeeding the late J. MORGAN RUFFNER.

RALPH D. JENKINS, superintendent of schools at Englewood, Colo., was elected president of the Colorado Education Association recently. VIRGIL ROGERS, superintendent of Boulder schools, was elected vice president.

JACK MCCLENDON, principal of the elementary school at Tomball, Tex., has been chosen superintendent to succeed J. B. OLIPHINT, who resigned to accept the position of county superintendent of schools.

CHARLES B. LEONARD has been elected superintendent of schools at Little Compton, R. I. He succeeds MARSDEN E. WHITFORD, resigned.

PAUL S. AMIDON has been reappointed superintendent of schools in

St. Paul, Minn., for a term expiring Dec. 21, 1940 by AXEL PETERSON, commissioner of education. The city council is expected to approve the reappointment.

C. E. SMITH is superintendent of the new Linwood School being erected near Union, Miss.

THOMAS E. RUSH, principal of the high school at Belmont, Mass., has been named superintendent of the school district that includes Norwell, Hanover and Hanson, Mass.

ARL BARRY, science instructor at the Chickasha Junior High School, Chickasha, Okla., has resigned that position to accept the superintendency at Randlett, Okla.

C. E. PEP MILLER of Esther, Mo., has been elected superintendent of schools at Thayer, Mo., to succeed FRED MILLER, resigned.

County Superintendents

DR. SUE M. POWERS has been re-elected superintendent of schools, Shelby County, Tennessee, for a term of four years, her fifth four year term.

GEORGE ELDRID HOGAN has taken office as county superintendent of schools, Humboldt County, California. He will serve four years.

CHAUNCEY D. DAVIS, superintendent of schools, Pacific County, Washington,

has accepted the superintendency of schools at South Bend, Wash. MARCELLA LAWLER, who was elected county superintendent to succeed Mr. Davis at the November general election, was appointed to fill his unexpired term. She will serve as an appointive officer until her elective term starts next September.

Principals

FREDERICK J. LEVERICH is the new principal of the Thomas K. Beecher School, Elmira, N. Y., succeeding J. HERBERT BENNETT, who is retiring.

L. W. AMBORN, superintendent of schools at Muscoda, Wis., for three and one-half years, has resigned to accept the principalship of the Waunakee High School, Waunakee, Wis.

E. P. McILWAIN, for the last fourteen years head of the science department of the Fulton High School, Atlanta, Ga., recently was named principal.

W. L. DAFFRON is the new principal at Benton High School, St. Joseph, Mo.

RICHARD M. BATEMAN, dean of boys, has been elevated to the principalship of the high school at Peru, Ind., succeeding WENDELL R. GOODWIN, who has taken over the principalship at Mishawaka, Ind.

FRANCIS J. CAVANAGH has succeeded ALBERT G. REILLY as principal of the Saxonville Junior High School, Saxon-



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P-570

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ville, Mass. Mr. Reilly has been appointed principal of the Memorial Junior High School, Framingham, Mass.

MORRIS C. GINSBURG has been appointed principal of the new Harry T. Stoddart Junior High School, formerly the Philadelphia Normal School. Mr. Ginsburg is now principal of an elementary school. He assumes his new duties February 1.

State Departments

MRS. GRACE CORRIGAN took office January 1 as state superintendent of public instruction of New Mexico. She formerly was director of certification and later chief clerk in the office of the state department of education. She reappointed as assistant state superintendent MRS. MARIE HOLLAND.

AGNES SAMUELSON, who retired as state superintendent of public instruction of Iowa on January 1, is executive secretary of the Iowa State Teachers Association and recently has been named chairman of the division of public instruction of the General Federation of Women's Clubs.

FLOYD R. ADAMS, superintendent of schools at Marshall, Minn., has been appointed director of the teacher personnel division of the Minnesota State Department of Education. GORDON O.

Voss, superintendent of school buildings at Proctor, Minn., has been appointed supervisor of trade and industrial education for the state department.

J. P. STREET, superintendent of schools, Atlantic, Iowa, for fourteen years, became deputy state superintendent of public instruction in Iowa on January 1. His successor at Atlantic is W. H. TATE, who has been superintendent of schools at Manly, Iowa, for six years.

In the Colleges

DR. HOMER PRICE RAINEY, director of the American Youth Commission, has accepted the presidency of the University of Texas. He will take up his new duties after June 1. His salary will be \$17,500 a year, the highest compensation ever provided by the state of Texas for an official. Doctor Rainey is a native Texan.

CLIFFORD B. JONES is the new president of Texas Technological College, Lubbock, Tex.

DR. CHARLES L. ANSPACH, president of Ashland College, Ashland, Ohio, has been selected as president of Central State Teachers College, Mount Pleasant, Mich. He will succeed Dr. E. C. WARRINER, who is retiring on July 1.

DR. HERBERT J. BURGSTALLER, president of Cornell College, Mount Ver-

non, Iowa, will become head of Ohio Wesleyan University on September 1.

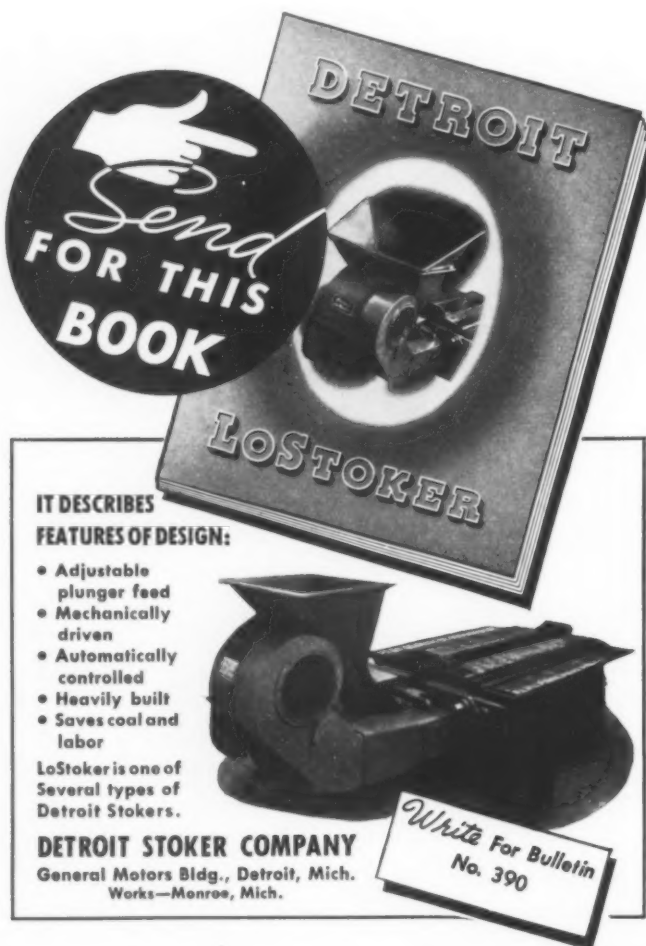
Resignations and Retirements

DR. WALTER DILL SCOTT, who has headed Northwestern University since 1920, is planning to retire from the presidency next fall, it has been disclosed by KENNETH F. BURGESS, president of the board of trustees. Doctor Scott will be 70 years old on May 1.

DR. FREDERICK B. ROBINSON has resigned as president of the College of the City of New York. Doctor Robinson, who has been on leave of absence since last July, will not return to the college, which he headed for eleven years. His resignation will become effective on June 30. DR. NELSON P. MEAD of the history department, who became acting president when Doctor Robinson went on leave, will continue in that capacity.

FREDERICK WINSOR, headmaster of the Middlesex School, Concord, Mass., since its founding in 1901, has retired. His duties were taken over by LAWRENCE TERRY, assistant headmaster.

E. T. CAMERON retired from the executive staff of the Michigan Education Association on January 1. Mr. Cameron became the first full-time executive secretary of the association in 1921. He continued in this capacity until 1935



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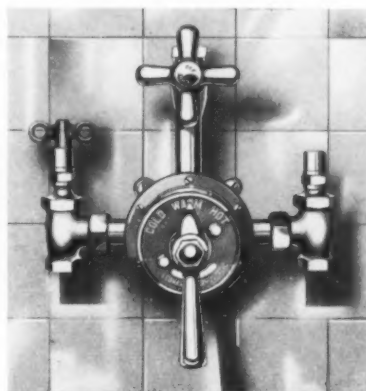
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when he became business representative of the association on a part-time basis.

GEORGE H. TILGHMAN has resigned as headmaster of the Morristown School, Morristown, N. J., a position he has filled for the last twelve years. The resignation is effective in July.

R. MALCOLM KEIRY has resigned his post as superintendent of schools at Hudson, Colo., to enter the field of safety education and driver training. His successor is MARVIN L. WILEY, high school coach.

HARVEY B. HEATH, superintendent of the first supervisory school district in Delaware County, New York, has retired.

Miscellaneous

CARL C. CRESS has been appointed supervisor of curriculums and instruction in the Riverside City Schools, Riverside, Calif., to succeed DR. F. G. MACOMBER, who has joined the department of education, University of Oregon. Mr. Cress formerly was principal of Harding Junior High School at Oklahoma City, Okla.

KATHERINE VAN BIBBER will succeed DR. JANET H. CLARK, who recently resigned, as headmistress of the Bryn Mawr School in Baltimore. Miss Van Bibber is a graduate of the school and a winner of the school scholarship to Bryn Mawr College.

Deaths

DR. WILLIAM J. O'SHEA, 75, former New York City superintendent of schools, died January 16 after an illness of more than two years. Doctor O'Shea retired on Jan. 31, 1934, after forty-seven years of service in the New York school system, ten years of which were as superintendent.

DR. GUY E. MAXWELL, 68, president of Winona State Teachers College, Winona, Minn., for nearly thirty-five years, died recently of pneumonia after a week's illness. He was to retire in June.

DR. ERIK A. ANDERSEN, 45, deputy superintendent of schools, Providence, R. I., who disappeared December 26, was found on January 4 in the Neponset River. It is thought that the pressure of an intensively active year in connection with the new senior high school building program at Providence was responsible for a nervous breakdown for which Doctor Anderson had been under treatment recently. He supervised the building of the \$15,000,000 trade school center at Providence.

KATHERINE M. KEYES, principal of Public School 95, Brooklyn, N. Y., died recently after a short illness. Miss Keyes had been principal of that school since 1917 and a teacher in the Brooklyn schools for forty-seven years.

DR. ANDREW ARMSTRONG KINCANNON, 79, died recently in New Orleans. Among the posts he held during his long educational career are chancellor of the University of Mississippi; superintendent of schools in Meridian, Miss., and principal of Bayonne Senior High Tennessee Teachers College at Memphis, and professor at Mississippi State Teachers College at Hattiesburg.

DANIEL P. SWEENEY, assistant superintendent of schools, Bayonne, N. J., and principal of Bayonne Senior High School, died suddenly following a heart attack. He had been a member of the Bayonne school system for more than thirty years.

MRS. MARIETTA PIERCE JOHNSON, founder of the Fairhope School of Organic Education at Fairhope, Ala., died recently at the age of 60 years. Mrs. Johnson founded her school in 1907 with six pupils, two of them her own children.

MRS. DAISIE I. HUFF, 57, assistant principal of the Roosevelt High School, Washington, D. C., died recently.

W. H. KIRK, superintendent of schools at East Cleveland, Ohio, for forty-seven years and one of the oldest school superintendents in the nation in length of service, died recently after a stroke suffered as he was about to preside at a school banquet.

Use PEABODY TABLES

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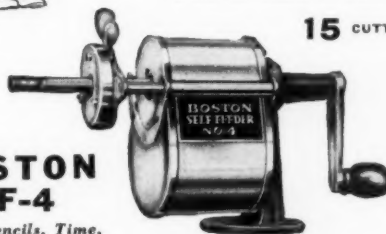
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SPORTSMANLIKE DRIVING SERIES. *Five books bound in one volume: The Driver, Driver and Pedestrian Responsibilities, Sound Driving Practices, Society's Responsibilities, How to Drive.* Washington, D. C.: American Automobile Association, 1938. Pp. 478. \$1.10 to schools, colleges and other educational groups; \$2.50 to general public.

Comprehensive, well-organized and well-written text in automobile driving that should be helpful in teaching.

TOLD OUT OF SCHOOL. By A. B. Shiffrin. Boston: Little, Brown and Company, 1938. Pp. 296. \$2.50.

A portrait of a woman—a school teacher—sympathetically and skillfully done.

THE STORY OF THE UNITED STATES. *A Biographical History of America.* By Henry Thomas. New York: Doubleday, Doran & Company, Inc., 1938. Pp. ix + 416. \$2.50.

The rise of the United States as interpreted through the too brief biographies of 45 outstanding leaders in politics, economics, invention, philosophy,

literature, speculation and social work.

ROADS TO A NEW AMERICA. By David Cushman Coyle. Boston: Little, Brown and Company, 1938. Pp. xiv + 390. \$2.75.

A New Deal economist points out in clearcut fashion how the "Great American Dream" can be realized through a continuation of the American pattern of private initiative. A common-sense treatment.

INFLATION'S TIMING AND WARNING SYMPTOMS OF ITS EXPLOSIVE STAGE. By Donald G. Ferguson and Allen H. Lester. Cambridge, Mass.: American Institute for Economic Research, 1938. Pp. 64. \$1 (Paper Cover).

Interesting interpretation of a series of economic data to indicate what lies ahead of the United States financially as a result of a combination of acts and forces.

PRIZE-WINNING ORATIONS. *Compiled and Edited by J. Kendrick Noble.* Year Book of Oratory. Volume X. New York: Noble & Noble, Publishers, Inc., 1938. Pp. ix + 234. \$2. Collection of collegiate orations that

appeal through freshness and thought as well as through style.

THE AMERICAN CONSTITUTIONS AND RELIGION. *A Source-Book on Church and State in the United States.* Compiled by Conrad Henry Moehlman, Rochester, N. Y., 1938. Pp. 142. \$1 (Paper Cover).

History of church-state legal relationships for convenient reference. Of interest to educators because of its implications for public education.

ONE-FIFTH OF MANKIND. By Anna Louise Strong. New York: Modern Age Books, Inc., 1938. Pp. 215. \$0.50 (Paper Cover).

Stirring writing of the Chinese struggle to maintain their independence against Japanese aggression.

SCHOOL FOR BARBARIANS. By Erika Mann. New York: Modern Age Books, Inc., 1938. Pp. 159. \$0.50 (Paper Cover).

The daughter of the famous novelist writes feelingly of what the Nazis have accomplished in substituting propaganda for education.

THE SCHOOL HEALTH PROGRAM. By C.-E.A. Winslow. *Publication of The Regents' Inquiry.* New York: McGraw-Hill Book Co., Inc., 1938. Pp. xiii + 120. \$1.50.

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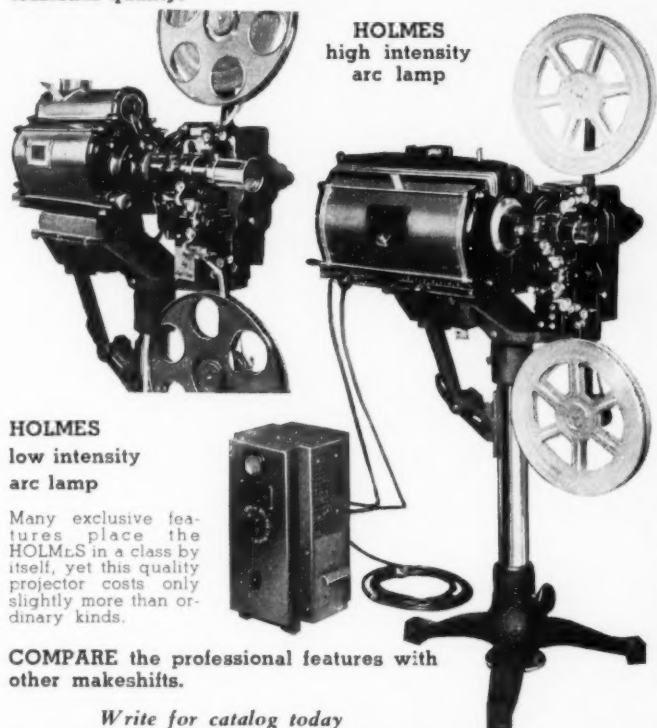
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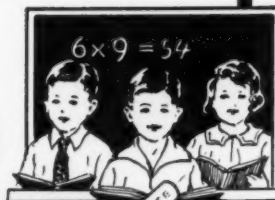
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health, is recommended in this monograph prepared by specialists in the recent New York State survey.

MOTION PICTURES AND RADIO. *Modern Techniques for Education.* By Elizabeth Laine. Publication of *The Regents' Inquiry*. New York: McGraw-Hill Book Co., Inc., 1938. Pp. x+165. \$1.75.

The importance of moving pictures and radio in forward looking state educational programs is given emphasis by the publication of a special monograph in this survey series. Offers valuable suggestions for state organizations.

AN APPROACH TO A PHILOSOPHY OF EDUCATION. By Theodore H. Eaton. New York: John Wiley & Sons, Inc., 1938. Pp. ix+273. \$2.50.

Functional approach to a philosophy of education in a well-balanced and easily read organization and style.

HANSEL AND GRETEL. *The Story of Humperdinck's Opera.* Adapted by Robert Lawrence. Illustrations by Mildred Boyle. New York: Silver Burdett Company, 1938. Pp. 40. \$0.60.

LOHENGRIN. *The Story of Wagner's Opera.* Adapted by Robert Lawrence. Illustrated by Alexandre Serebriakoff. New York: Silver Burdett Company, 1938. Pp. 42. \$0.60.

Two unusually fine books in their method of presenting easily and simply the stories of two operas. Should be valuable supplementation for use of standard recordings.

Just Off the Press

UTILIZATION OF COMMUNITY RESOURCES IN THE SOCIAL STUDIES. Edited by Ruth West. *Ninth Yearbook, National Council for the Social Studies.* Cambridge, Mass.: National Council for the Social Studies, 1938. Pp. vi+229. \$2 (Paper Cover).

THE STORY OF IRRADIATED EVAPORATED MILK. Chicago: Irradiated Evaporated Milk Institute, 1938. Pp. 24. Free on request. (Paper Cover.)

ROBERT IRWIN REES: An Appreciation. Prepared by Raymond G. Fuller. New York: National Occupational Conference, 1938. Pp. 47. Published for limited distribution. (Paper Cover.)

THE NONTECHNICAL ASPECTS OF ENGINEERING EDUCATION. *A Bibliography Compiled by The Cooper Union Library.* Bulletin, Engineering and Science Series, No. 18. New York: The Cooper Union for the Advancement of Science and Art, 1938. Pp. 10. Free, with limited distribution. (Paper Cover.)

TEACHING PRACTICES AND ACHIEVEMENT IN PENMANSHIP IN THE PUBLIC SCHOOLS OF MICHIGAN. By Clifford Woody. *Bulletin No. 151, Bureau of Educational Reference and Research.* Ann Arbor, Mich.: School of Education, University of Michigan, 1938. Pp. vi+101. \$0.50 (Paper Cover).

HISTORIC NEW ROCHELLE. By Herbert B. Nichols. New Rochelle, N. Y.: The Board of Education, 1938. Pp. xv+212.

OUR CEREALS. A Nutrition Unit for the Fourth, Fifth and Sixth Grades of the Elementary Schools. By Mary S. Rose and Bertlyn Bosley. Illustrated. New York: Bureau of Publications, Teachers College, Columbia University, 1938. Pp. vi+34. \$0.35 (Paper Cover).

STANFORD UNIVERSITY. NEW BUILDING OF THE SCHOOL OF EDUCATION AND A HISTORY OF THE WORK IN EDUCATION, 1891-1938. Illustrated. Stanford University: Stanford University Press, 1938. Pp. 35. (Paper Cover.)

SELECTED LEGAL PROBLEMS IN PROVIDING FEDERAL AID FOR EDUCATION. By Robert R. Hamilton, Introduction by Paul R. Mort. *Staff Study No. 7, Prepared for Advisory Committee on Education.* Washington, D. C.: Government Printing Office, 1938. Pp. ix+71. \$0.15 (Paper Cover).

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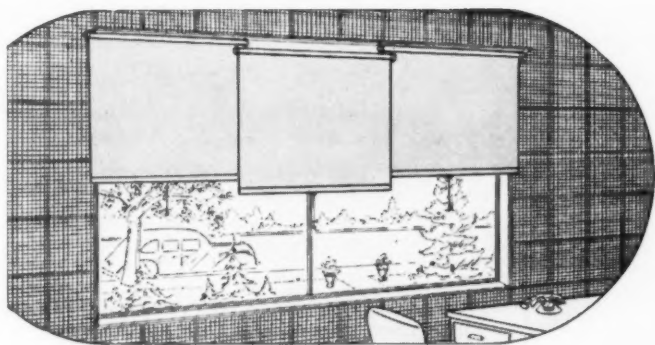
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IT'S SAID THAT—

A new open stock pattern called the "Meadowbrook," on Econo-Rim china has been brought out by the ONONDAGA POTTERY COMPANY, Syracuse, N. Y. . . . The IMPERIAL BRASS MANUFACTURING COMPANY, 1200 West Harrison Street, Chicago, has announced a new automatic primer for floor drain traps, designed specifically to eliminate sewer gas and foul odors. . . . The Guild-sander, moderately priced portable electric belt sander, recently introduced by the SYRACUSE GUILD TOOL COMPANY of Syracuse, N. Y., has the power to do all types of sanding and the adaptability to sand all straight or slightly curved surfaces. . . . A new 16 mm. portable continuous projector that is being placed on the market in both silent and sound models by VICTOR ANIMATOGRAPH CORPORATION, Davenport, Iowa,

embodies a patented "advance-feed" principle which ensures trouble-free performance and protection against film destruction.

The KEWANEE BOILER CORPORATION, Kewanee, Ill., has issued a compact catalog giving complete specification data and measurements on every size of all models of Kewanee boilers. . . . A new projector for 2 by 2 inch and 3¼ by 4 inch color slides has been announced by SPENCER LENS COMPANY of Buffalo, N. Y. . . . A duplicating machine that operates on the liquid rotary offset principle and duplicates in several colors at one time from one master is offered by the NEISON CORPORATION, 2 West 45th Street, New York City. . . . A series of leaflets issued by the KAWNEER COMPANY, Niles, Mich., describes this company's new all-aluminum school windows.

"Punchet," the new ticket punch manufactured by the WM. SCHOLLHORN COMPANY of New Haven, Conn., is strong and rugged and fits the hand easily. . . . The TRUSCON LABORATORIES, Detroit, have developed a roofing treatment that will restore the waterproof and water-shedding character of the roof and recolor and renovate its appearance. . . . A new grease dissolving cleansing material called Softene, man-

ufactured for heavy duty cleaning operations, has been announced by the CLIMALENE COMPANY, Canton, Ohio.

COMBUSTION SERVICE COMPANY, 1451 Broadway, New York, has recently developed a liquid chemical for the proper conditioning of fuel oil so that combustion and burner operation will be satisfactory. . . . All sound effects are faithfully reproduced in the two new and improved 16 mm. sound-on-film projectors by AMPRO CORPORATION, 2839 Western Avenue, Chicago. . . . Laboratory Bulletin No. 503 of the U. S. STONEWARE COMPANY, Akron, Ohio, contains complete and comprehensive information on acidproof laboratory sinks and piping. . . . The new all-wave multicoupler antenna system of GENERAL ELECTRIC, Bridgeport, Conn., offers a solution to schools and similar structures in which a large number of radio receivers may be operating at once.

The duplicator recently introduced by the COLUMBIA RIBBON AND CARBON MFG. CO., INC., Glen Cove, N. Y., features simplicity of operation and low cost method of producing copies. . . . Many distinctive features incorporated in the Detroit LoStoker are illustrated in a new descriptive catalog of the DETROIT STOKER COMPANY, Detroit.



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For March 1939

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*From papers presented at the A.A.S.A. convention in Cleveland, February 25 to March 2.

N EAR commencement time the pupil bobs up on the crest of the wave, but more than likely this is the hour when the school administrator touches bottom. Many schoolmen, having abandoned that leaking vessel, Traditional Commencement, are adrift in a dense fog, some of them all but sunk. Judging from the SOS calls that cross an editor's desk, they need a breeches buoy, first aid equipment and prompt resuscitation measures.

For these sinking helmsmen, The NATION'S SCHOOLS has equipped a life boat in the form of a special Commencement Portfolio for April. Manned by a cosmopolitan crew that has staunchly outweathered one or more modern commencements, rescue is in sight. Keep up your courage, lads Help is on the way.

RURAL schools need all the attention they can get. This year's yearbook (page 24) considers their peculiar needs, and three other authors in this issue speak constructively in their behalf: Butterworth (page 20), Chambers (page 60) and Murray (page 68). Next month there will be an article on the small school annual, of particular interest to village and consolidated high schools. Another article for April is likely to bring some sharp rejoinders. "Is the small town a good place to teach?" is the question it poses. Paul Herbold, who has taught in small towns and rural districts, has some searching remarks to make on the hazards of such a life.

T HE whole city school administration had changed. Then, with less than a year in office, the newcomers were called upon to formu-

Published monthly by The NATION'S SCHOOLS PUBLISHING CO., INC., 919 North Michigan, Chicago, and 101 Park Avenue, New York. Otho F. Ball, president; Raymond P. Sloan, vice president; Stanley R. Clague, secretary; J. G. Jarrett, treasurer. Yearly subscription, United States and Canada, \$2; foreign, \$3. Current copies, 25c each. Member Audit Bureau of Circulations. Copyright, 1939, by The Nation's Schools Publishing Co., Inc. Entered as second-class matter Jan. 16, 1928, at the Post Office at Chicago, Ill., under the Act of March 3, 1879.

CONTENTS

late in a few weeks' time a \$3,250,000 school building program, for a P.W.A. grant necessitates prompt action.

They did it, too, and with economy and efficiency. Were they supermen? Well, no! They were merely reaping the benefits of a long range planning program. Ten years earlier, a comprehensive study had been made, population trends predicted, proper sites selected and the public enlightened. There remained only a reappraisal and a confirmation of the matured plan, with recent minor changes.

This incident took place in Rockford, Ill. Selmer H. Berg, the superintendent, will tell of it in detail in the April number as a convincing argument for long range school planning.

PARTLY responsible for the critical attitude of the public regarding the school and its curriculum is the matter of pupil failures. Does the school take steps to reduce failures to an absolute minimum or, perhaps, to prevent them?

The principal of Graveraet High School, Marquette, Mich., Henning J. Anderson, will outline in the next issue a study made of unsatisfactory pupil accomplishment by the teachers and administration of his own school, a study that was well rewarded.

AFTER April, what? Several subscribers have asked what they may expect later in the way of special portfolios. Without letting all our cats out of the bag at one bound, we are moved to announce that in May the subject for special consideration will be Summer Renovation. In June, the Portfolio of the Month will consider Visual Education.

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*Education Produces Wealth 47

L. JOHN NUTTALL enumerates the ways in which public education contributes to the production of wealth, and asks in return a fair share of the social income for educational support.

*Curriculum and Child 49

CARLETON WASHBURN, chairman of the yearbook committee of the National Society for the Study of Education, summarizes the content of the thirty-eighth yearbook.

Design in England 50

ROGER TOMALIN, an English architect, traces the trends in English school design to Continental influences. The Burlington School for Girls at Hammersmith, which is described, takes its inspiration from recent Dutch architecture.

*Speaking for American Youth 55

Youth has its part to play in social planning, states PRESIDENT EDMUND E. DAY of Cornell, and its failure to speak is not a sign of either indifference or complacency.

*National Aid Is Imperative 57

Says FLETCHER HARPER SWIFT, who points to English and French systems of national aid in which a high degree of educational responsibility is assumed by the state with resultant high literacy.

High Schools or Peasantry? 60

Educational inequalities between rural and urban areas in the United States are widening the gap between city and country, says M. M. CHAMBERS, who lists some legal limitations that are retarding rural school progress.

Gang Showers for Girls 64

A controversial topic is discussed by HARRIET V. FITCHPATRICK, supervisor of physical education for the Cleveland board of education.

From 50 to 1000 Square Miles 68

How inequality of educational opportunity was wiped out through bus transportation during an eight year period is told by L. C. MURRAY, superintendent at Aitkin, Minn.

The Convention News

Administrators' Extra From Cleveland 33

Presenting in tabloid newspaper form a report of the sixty-ninth annual convention of the American Association of School Administrators, which met in Cleveland, February 25 to March 2.

The School Cafeteria

Learning From the Lunchroom 70

An article on policies of school lunchroom management of particular interest to administrators is contributed by EVELYN SMITH of the University of Illinois.

Where Kitchen Is Classroom 74

The third in a series of five cafeteria layouts selected by MARY DEGARMO BRYAN, department editor. The cafeteria of Thomas A. Edison Vocational School, Elizabeth, N. J., presented this month, is used for pupil instruction as well as for school feeding.

*From papers presented at the A.A.S.A. convention in Cleveland, February 25 to March 2.

LOOKING FORWARD

Fire Drills

SCHOOL buildings are unusually hazardous. The large majority of them are not fire resistant and offer little protection to the occupants. Many of the fire-resistant buildings are so constructed that the vented air is drawn up to the attic through open stair wells, a condition that would result in great loss of life if a fire occurred on the first floor. Any building of more than one story offers a definite hazard to child occupancy. Heating plants are frequently located within the building. Shops, boiler plants, coal storage bins within buildings, storage rooms and laboratories are too seldom equipped with automatic sprinklers. Many school plants have a basic plan so involved that corridors are dead-ended and getting in or out of some sections of a building is similar to learning a maze.

These hazards may be progressively eliminated, but it will take years to do so. In the meantime every effort should be made by building authorities to take seriously the training of children to automatic response in leaving the building during possible emergencies. Fire drills should be held at least once a month, possibly every week during September and October, so that the children may become accustomed to leaving the building quickly and without confusion or panic. These drills should then be continued throughout the year and everyone, including the teachers, should be required to clear the building. Intelligent fire drills are the only means immediately available to the teachers and principals to avoid the major hazards of fire. They should be a "must" item in every school program and their neglect should be followed by definite disciplinary action. The 1939 objective: More and Better Fire Drills!

Twilight and Dawn

IN THE issue of the *Nation* for Dec. 17, 1938, James Wechsler, a Columbia University, not a Teachers College, alumnus, writes feelingly about "Twilight at Teachers College." After a rather uncritical glorification of the past in which he apparently sees only "giants," he creates the impression that there has been a definite decline in prestige at Teachers College during the administration of Dean William F. Russell. This article created widespread comment and was answered

by the faculty advisory committee in *School and Society* (Feb. 4, 1939) and by Dr. George S. Counts in *The Social Frontier* for February 1939.

With Wechsler's general thesis we have no immediate interest. Other individuals more familiar with inside conditions can determine the truth or falsity of these charges. However, a factor that has been overlooked in both answers deserves some consideration.

When James Earl Russell, a man of great foresight, strength of personality, clearness of vision and unusual acuity in selecting men, pioneered Teachers College, the opportunities for sound undergraduate work in professional education, to say nothing of the graduate field, were meager. The normal schools were the stepchildren of advanced education and while some universities of first rank had departments of education in their liberal arts colleges, the conflict between the academic disciplines and "pedagogy" was so sharp that development of professional education could not be called easy.

This condition Dean Russell sensed, and he was the foremost in a group of men who believed that professional education could develop only as it became independent and separate. At Teachers College the idea of complete separation between the liberal arts college and professional education was most completely carried out. Dean Russell also understood clearly and believed firmly that teaching in an institution of higher learning must be free. He believed in free expression and in competition. Ideas did not frighten him. Every conservative thinker added to the faculty was deliberately balanced by an ardent progressive. The students were considered sufficiently mature intellectually to receive all types of stimuli and teaching and to make their own choices. Other institutions of similar character were too immature to offer competition. Whenever a strong personality appeared on the educational horizon, he was invited to become a member of the Teachers College faculty. This "call" was the culmination of many ambitions.

In the fullness of time, many of the outstanding men like Suzzallo, Coffman, Jessup and Cubberley went forth to other institutions, carrying with them the tradition of freedom in teaching and emphasis upon the man rather than organization. Coffman and Jessup also saw clearly the growing danger of intellectual

sterility in professional education through the artificial and unsound separation of education from its essential foundation in the social studies and natural sciences. They were responsible for the development of the cooperative school of education which sought a more logical relationship with the liberal arts college.

The procession continued. Big men came to Teachers College and big men left. Their influence began to be felt throughout the nation's schools for the professional training of teachers and administrators. At their own institutions they likewise trained good men who became outstanding teachers and leaders. All of the superior students no longer sought Columbia. Charles Hubbard Judd was bringing the University of Chicago to front rank during the same period.

Dean Russell also realized that there is a high correlation between obtaining students and placing students. Despite the wishful thinking of the academic scholar, professional students pursue advanced study primarily to improve themselves for a better position and tend to patronize the institution that can combine both good education and placement in a happy measure.

For several decades after the organization of Teachers College, there was little competition from other sources. Columbia had only to crook its finger and the educators moved eastward. Teachers College grew rapidly. Classes were large. There were big men on the faculty, but the average student was also exposed to much mediocrity. For every first-rate teacher there were some very average teachers. It is one of the prices paid for size where certain budgetary practices are followed. Students began to attend institutions that offered smaller teaching groups.

Time passes. In 1925 R. M. Hughes made a study of the graduate schools of America. In the area of education he listed 19 institutions worthy of inclusion. Teachers College still outranked Chicago slightly, but Harvard, Stanford, New York, Iowa, Minnesota, Ohio State, Michigan and Yale were beginning to receive recognition. Eells made a general retabulation of this study (*School and Society*, April 24, 1926), placing Chicago and Harvard above Columbia University for general graduate study.

The general growth of schools of professional education throughout the country and the development of capable scholars in other institutions no longer gave Teachers College the full stage.

In 1934 the American Council on Education made a report on graduate instruction and listed ten institutions as "distinguished" in character without attempting further discrimination. These included Harvard University, Ohio State University, Teachers College, Stanford University, University of California, University of Chicago, University of Iowa, University of Michigan, University of Minnesota and Yale University. In less than a decade since the first study, nine other institutions had been classified as "distinguished"

while an additional 20 institutions were listed as well-qualified in this specific area!

Eells also made a special tabulation of this study and reported in a significant table (*School and Society*, June 2, 1934) that Columbia had dropped from third to fourth place, and that in the eight years intervening between these two studies, seven state supported institutions had definitely improved their standing while seven voluntary institutions had lost in rank. Cornell and Stanford were the only private institutions to show gains!

During the same period significant changes were taking place in placement. Boards of education and superintendents were feeling the pressure of the movement toward localism. State supported institutions in other parts of the country developed relatively greater strength in placement because of better methods and better public relations.

Graduate work in institutions of advanced learning throughout the country has made significant advances within the last two decades, a healthy and exceedingly desirable development both for education and for the country in general. No single institution can today claim dominance in professional education. There is a group of leaders but they share the honors. The individual supremacy of Teachers College has passed but this fact does not imply that the school has degenerated or that the age of educational "giants" has passed. Teachers College today still boasts of the largest collection of teaching liberals in the country! If it is the natural twilight of the supremacy of a single institution, it is also the dawn for professional schools of education throughout the United States, a condition for which Dean Russell is not responsible and which he recognizes and heartily approves.

The New President

DOCTOR BEN. G. GRAHAM, the new president of the American Association of School Administrators, has been superintendent of the Pittsburgh public schools since 1930, succeeding the late Supt. W. H. Davidson, who also had been honored by election to the presidency of the administrative department of the National Education Association.

The new president is a native of Pennsylvania and a product of its schools, receiving his undergraduate training at Westminster College and his graduate work at the University of Pittsburgh. He has been twice honored by receiving the doctor of laws degree. Starting as a science teacher in a country school, Doctor Graham successively held small town principalships and superintendencies until called to Pittsburgh as a science teacher in 1909. He was appointed principal of a junior high school seven years later, leaving Pittsburgh in 1919 to become superintendent at New Castle. After seven years he returned to Pittsburgh in

1926 as associate superintendent, succeeding to the superintendency four years later.

In his educational philosophy and practice Doctor Graham may be classified as a rational progressive. He is extremely open-minded to new ideas but is probably more interested in the cautious experimental than in the more currently popular emotional approach to new problems. He was outstanding as a junior high school principal and noted for his pioneering work with the work-study-play concept in elementary education.

As an administrator he is soundly realistic and understands so well the position of the school in our democratic society and the relationship of the people, as well as the teaching profession, to the educational scheme that he seldom makes administrative errors. The Pittsburgh public school system is by no means the easiest among the large city systems to operate. It is definitely on the "hard side" of the scale. His understanding and great social tact, his strong fighting qualities, when fighting is essential, combine to produce an unusual administrator.

Doctor Graham is also unusual among schoolmen in that he has reared a family of eight children. He has for a number of years been active in promoting federal aid for education, and in this area has taken a statesmanlike long view of the problem. He also finds time to be active in a number of professional organizations and for five years was associated with *The Nation's Schools* as a member of the editorial board. His selection as president is a definite recognition of his outstanding qualities.

Grade Separations

THE shock of the Utah school bus tragedy, when the Flying Ute demolished an automobile during a severe snowstorm, killing and maiming some scores of children, has caused a number of people to raise the issue of whether the transportation of school children is not too dangerous to continue as an administrative policy. They argue that each year sees an increasing number of school transportation accidents and that the old one room school, poor as it might be educationally, at least did not cost the lives of any children.

While it is possible to sympathize with the feeling that prompts such reasoning, the conclusion appears to be somewhat wide of the mark. School bus accidents, like those in other transportation areas, are due to a number of reasons. Politics and school bus service do not mix well. Competency in drivers must be determined in terms of the job to be performed and not because of political or social consideration. Defective and obsolete vehicles are the result of either short-sighted economy or lack of an adequate financial program.

The Utah tragedy was due to the fact that the school

bus was forced to cross a dangerous railroad track, complicated by low visibility caused by a heavy snowstorm. The remedy in this instance is not to eliminate bus transportation but rather to push the essential program of grade separations so that vehicular traffic is not forced to the risk of crossing a high speed railroad right-of-way.

Fortunately the federal government has recognized the danger of these exposed highways and is now subsidizing a nation-wide program of grade separations to eliminate these generation-old dangers. Grade separations might be pushed more aggressively and those involving school bus routes should have first call on federal and state funds.

The answer to these accidents is not the elimination of essential school transportation service but the rapid overcoming of the current hazards in this field. School children can be transported safely if all of the accident contributing factors are isolated and progressively eliminated.

N.Y.A. Values

IN THE January issue of the *Educational Record*, David R. Williams presents an evaluation of the work accomplished through N.Y.A. work scholarships. His conclusions indicate that the efforts of these individuals, when properly directed, have been of unusual value in contributing to the extension and intensification of research carried on at certain advanced institutions of learning. Where the work of these students also was related to their field of concentration, these scholarships made possible a practical education and the initiation of these students into research practices that should be invaluable as a part of their education. The offering of these scholarships to worthy and needy students also permitted them to complete their education, which would not have been possible otherwise. So far as the evidence presented is concerned, the ledger balance must be considered as unusually favorable to this emergency practice. It makes good reading.

The N.Y.A. scholarship is sound in concept and in practice. The federal government has permitted great institutional freedom in working out this problem. It has concerned itself chiefly with the major concept behind the scholarship project—an equalization of individual opportunity by overcoming the handicap of economic incapability. Our own impression is to the effect that, both in concept and in practice, this attempt on the part of the federal government to erase the barriers of economic inequality is among the most worthy of depression policies. The general policy should be encouraged, continued and expanded.

The Editor



Left: Tools, parts and fittings are made in the machine shop of the White Haven High School in Shelby County, Tennessee, for use in other departments.

Rural Education

JULIAN E. BUTTERWORTH

As would be expected, there was a marked decrease between 1930 and 1934 in the per pupil cost of schooling and in salaries, although there was some recovery in both by 1936. Some improvement was shown in the average length of the school term, in the number attending for each hundred enrolled, in the percentage of men teachers in high school and in the number of larger schools. There was considerable improvement in all other factors reflecting the situation as to high school opportunities and in the preparation of teachers in one and two room schools.

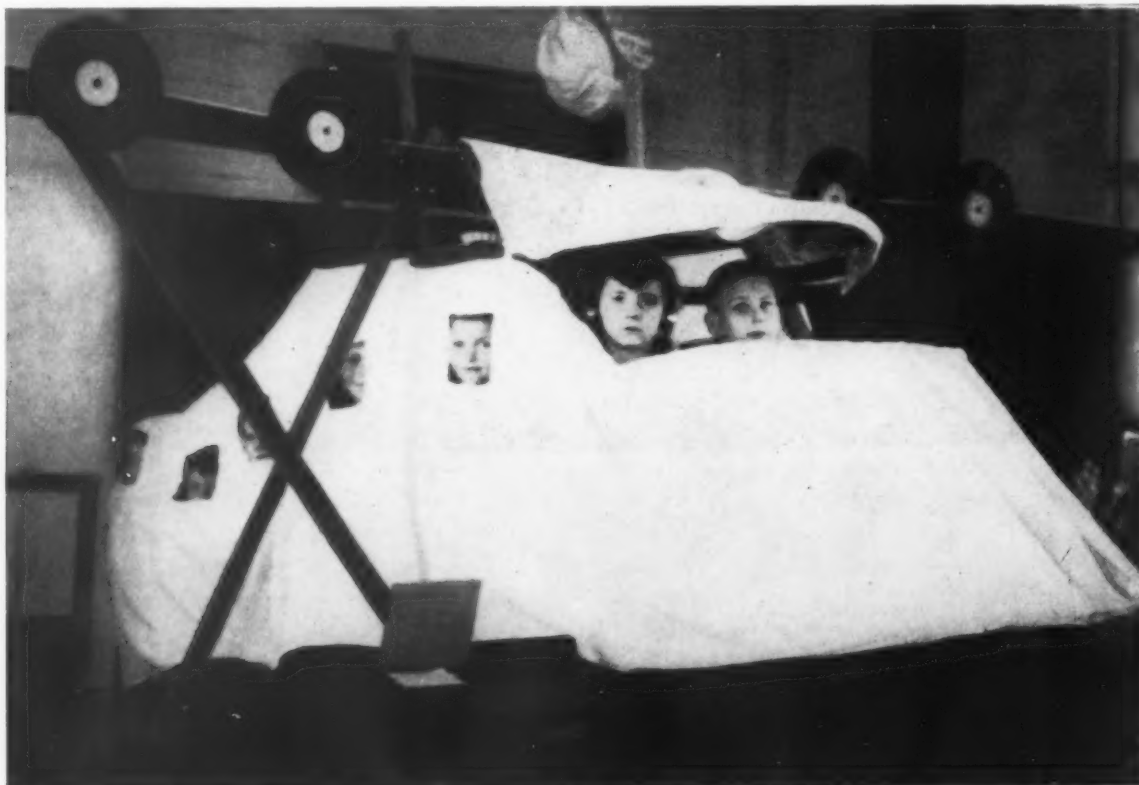
WHAT has happened to education in the rural areas during the period of the depression?

To answer this question through the use of statistical materials is not easy because data regarding rural and urban schools are often not segregated or, when segregated, are frequently not given on a comparable basis over the years. However,

in the table on page 22 there are presented some useful facts about schools in areas having a population of less than 2500. By comparing the data for each of the several years, some notion of the general trend during the depression period may be obtained. At the present time information for the year 1935-36 can be given on only a few of the items.

So much for a general picture of educational trends. While there has been, during that entire period, a forging ahead for the country as a whole, there undoubtedly are rural areas, perhaps even entire states, where a loss has occurred. Also, while in some of these items the depression has probably been an important, perhaps even the chief, stimulus to improvement (*e.g.* increased

Geography is exciting and realistic when one travels to foreign lands by the China Clipper, as in this Michigan rural school.



During Lean Years

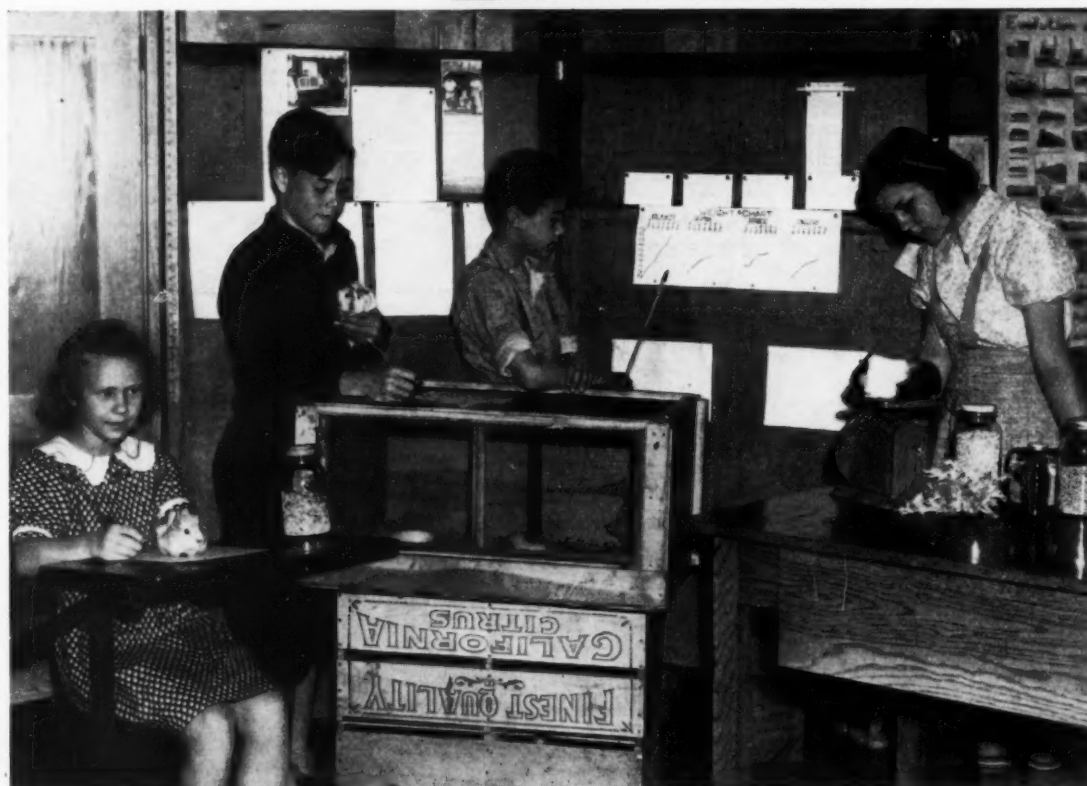
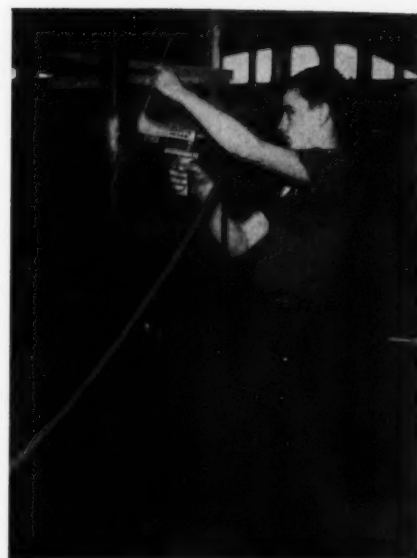
Director, Graduate School of
Education, Cornell University

enrollment in high school and better training of teachers), in other items better conditions probably reflect the determination of the American people to give their rural children adequate schooling despite unfavorable conditions.

Although it would seem that the depression offered a powerful motive for the reorganization of large administrative units of the county type, developments along this line have been disappointing. Only West Virginia (in 1933) adopted a complete form of county unit during this time, although in Ohio, Kentucky, Pennsylvania, Texas and other states minor changes, looking toward the improvement of local units, have been made or plans to that effect have been proposed.

There has, however, been a slow, but definite, increase during this period in the number of larger schools made possible through consolidation. This is indicated by the figures in the accompanying table showing a decline from 1930 to 1936

Right: Painting sheet metal by spray in the metal shop at White Haven High School, Shelby County, Tennessee. Below: Practical procedure in home economics cottage at Nuttall School, Lookout, W. Va.



Left: Pupils in the Huff School in Kent County, Michigan, study diets of guinea pigs to determine the effects of food on health, growth and temperament.

of 18,003 one room schools and an increase of 1632 consolidated schools (down to 1934).

In New York State one form of consolidated district, the central rural school district, has made marked progress and has brought, literally, an educational revolution in the rural areas of that state. This central district, including usually a village and its contributing farm territory, stresses community relationships and functions. From 1930 to the present, the number of these districts increased from 65 to 268. About 3500 smaller schools and districts have been included in this centralization program.

One of the really amazing developments in American education has been the increase in the number of secondary school pupils. In the entire country the percentage of pupils in high school increased from 10.2 per cent in 1920 to 17.1 per cent in 1930 to 22.7 per cent in 1936. As the accompanying data show, the rural areas have not lagged in this matter. The enrollment in the upper four grades of the rural high schools increased from 1,477,000 in 1930 to 2,202,000 in 1934. The total percentage of the rural school enrollment in the high school increased from 11.2 to 16.1 per cent in 1934, while the percentage of those 14 to 17 years of age attending high schools jumped from 39.5 to 60.5 per cent. In this same period there was an increase of 883 rural schools offering high school work.

The last decade also has been characterized by a revolution in our

thinking on the curriculum. Activity types of programs have attained wide popularity. There are no definite data showing the extent to which revised curriculums have been introduced into rural schools during this period, but that this trend has not been insignificant is generally conceded. Many of the small rural schools, even, have introduced activity elements of one sort or another, such as an outdoor kiln for a project in ceramics carried on in a one room school in Monongalia County, West Virginia.

This period has seen also a continued expansion in the vocational education of rural young people. Agriculture is, of course, an important vocation for those in rural areas. From 1930 to 1937 the number studying agriculture in day schools increased from 114,530 to 230,423. For the most part these were boys although, in 1937, 5022 girls were enrolled. Agricultural training is, however, not confined to this type of school. During the same period the number of part-time pupils in agriculture grew from 4886 to 29,328. These programs are offered primarily to young men out of school seeking to extend their vocational knowledge. That the needs of adult farmers have not been neglected is evidenced by the increase from 63,902 in 1930 to 122,747 in 1937 of such persons attending evening schools of agriculture.

Another indication of a growing interest in scientific agriculture is the marked increase in the membership of the Future Farmers of America.

This is an organization designed primarily for boys regularly enrolled in agricultural classes or schools. The significance of this organization for rural life and education may be shown by a statement of four of the 12 objectives stated in the national constitution: (1) to develop competent, aggressive rural and agricultural leadership; (2) to create and nurture a love of country life; (3) to create more interest in the intelligent choice of farming occupations; (4) to participate in worthy undertakings for the improvement of agriculture.

Many types of activities are engaged in, among which are exhibits in local and county fairs, project tours, father-son banquets and joint meetings with Granges. In 1931 there were 2500 F.F.A. chapters, enrolling 57,000 members. By 1938 the chapters had increased to 5700 and the enrollment to 171,000.

Presumably there has been a corresponding growth in home economics in rural areas, for the 238,058 studying this subject throughout the country in 1930 had grown to 496,225 by 1937.

The vocational report for 1937 calls attention to the fact that in rural high schools homemaking and agricultural departments are, in increasing numbers, undertaking joint activities that have contributed much to making rural life attractive to young people. The widely known 4-H Club organization, with more than a million members, also has grown in numbers and in influence. In the judgment of a competent

Some Data Regarding Schools in Rural Areas

	1926	1930	1934	1936
1. Cost (current) per pupil A.D.A.	\$ 67.72	\$ 72.01	\$ 53.31	\$ 57.22
2. Average salaries in one room schools	\$761.00	\$788.00	\$517.00 ¹	.....
3. Average salaries of teachers, supervisors and principals	\$855.00	\$979.00	\$787.00	\$827.00
4. Average length school term (days)	.....	160.6	160.8	163.19
5. Number attending for each hundred enrolled	.....	81.3	83.6	83.0
6. Number of public rural schools:				
One room	161,531	148,711	138,542	130,708
Two room	20,135	23,290	24,411	.....
Consolidated	13,584	15,616	17,248	.....
7. Number of schools offering high school work	13,751	16,744	17,627	.....
8. Enrollment in high schools (upper four years)	1,080 ²	1,437 ²	2,202 ²	.....
9. Total percentage of rural school enrollment in high school	8.3	11.2	16.1	.....
10. Percentage of pupils age 14 to 17 attending high school	29.7	39.5	60.5	.....
11. Percentage of men teachers in high school	42.6	40.2	44.7	.....
12. Percentage of teachers with two or more years of normal school preparation:				
One room	.....	23.3	42.1 ¹	.....
Two room	.....	36.4	60.1 ¹	.....

Data are from Office of Education Bulletin No. 2, 1937.

¹Data for 1935; *000 omitted.

observer, this group was particularly useful during the depression, when money was scarce, in getting young people to provide their own amusement through local dramatics, dancing, song fests, skating bees and the like.

But in any democratic society many young people born and reared in rural areas will find their vocational opportunities in the cities. This is due, in part, to the fact that urban living has many attractions even to those from the country and, in part (at least in the United States), to decreasing opportunities



Above: The home economics building at Nuttall High School, Lookout, W. Va., was constructed of material from an abandoned school. Labor was provided by the C.W.A. Left: Serving tea in the school cottage dining room.



for employment in agriculture. An adequate educational program for the rural areas should, therefore, include facilities for vocational education in industry.

Developments in this direction are as yet relatively meager, but here and there one sees evidence of what is certain to come. For example, the White Haven High School, a part of the Shelby County system in Tennessee, has provided for the young men of the rural sections of the county six formally organized lines of industrial training: woodworking, wood finishing and decorating; drawing and drafting; sheet metal work, including welding; machine shop practice, and auto mechanics. About 200 boys are enrolled. A similar program on a less comprehensive scale is under way at Bartlett in the same county.

An interesting development along

this line has taken place during the last few years in New York State where various technical courses have been introduced into four of the six state schools of agriculture. In October 1938, 307 students were following specialized courses in such phases of industrial work as auto mechanics, electricity, watchmaking and clock repairing, industrial chemistry, building construction and architectural drawing. This was an increase of 128 over the year 1937-38. The number admitted to any department is strictly limited, but it is to be presumed that over the years there will be an extension in the variety of the programs offered.

We know from general observation that the recent developments in adult education have extended into the rural areas and that many high schools are supplementing the extension work in agriculture and

homemaking carried on cooperatively by the federal government and the state colleges of agriculture. Evening classes in all kinds of general and special subjects have been provided, often without additional instructional assistance, for those who want to keep abreast of new developments.

While many rural schools have improved their health programs through better medical inspection, school nurses, dental clinics and health teaching, little appears to have been done in providing special educational facilities in the way of sight-saving classes, open-window rooms, classes for the backward and the like. Now and then one hears of activities along this line but not frequently enough to be convinced that significant progress is being made.

The picture is a much more cheerful one than might have been expected, considering the difficult times through which we have been passing. Such facts of national scope as one can get, supplemented by glimpses here and there of local achievements, increase one's confidence that we are making substantial progress toward the attainment of a democratic system of education. Much remains to be done, however.

Yearbook Goes Rural

HOBART M.
CORNING

Colorado Springs, Colo.



"Farm Scene," a W.P.A. mural for the Sunny Acres School, Cleveland.

THE 1939 yearbook of the American Association of School Administrators, like the 1938 yearbook, is devoted to the problems of youth. The earlier publication made a distinct contribution to the literature of the profession by analyzing all of the problems of the nation's youth in the social scene of today.

The present yearbook is devoted to a more restricted area. It concerns itself primarily with the in-school education of youth who live in small communities. Although the scope of the study is more restricted than that of the preceding yearbook, and although many phases of the study are administrative in nature, the commission has endeavored to keep constantly in the foreground the welfare of the youth served by the small school system.

It is the hope of the commission that this book will not be considered just another textbook in school administration. For a long time it has been felt that too little study has been made of the problems and possible solutions thereto which arise in the small school system. The profession has access to many books that deal with administrative problems. Too frequently, however, the solu-

tions which are suggested to administrative problems are technics and procedures that are followed in meeting similar situations in large school districts.

Throughout the several meetings of the commission and as a guiding factor in the work done by individual members, the original intent has been kept in mind, namely, to make this report a handbook that will be of practical value to administrators in small school systems. General theory, an explanation of technics, procedures and standards found in other books have been omitted except by reference. Through the cooperation of school administrators in small school systems throughout the nation the serious problems have been set forth and solutions have been suggested in terms of the best practice in the field.

The commission has approached its task with the conviction that the problems and difficulties in the administration of a small school system are unique and that their solutions, if effective, must be in terms of conditions that are found in the small school system itself. The publication suggests workable solutions and procedures.

In the preparation of this yearbook the commission has been guided by certain fundamental principles, expressed as follows:

1. The small community is an essential and important factor in American life, since almost half of the total population is found in communities of 2500 or less and since the number of administrative units is vastly larger in rural territory.

2. Since there are many more school systems in small communities than in large ones and since half of the nation's school population is in small centers, the small school system is a vital institution in American education.

3. It is entirely possible to provide a rich and complete educational experience that will be vital in the lives of children residing in small communities.

4. The small school system is not a mere miniature of the larger organization but it is a unique institution which should be fully developed in terms of its own resources and needs without resorting to mere imitation of the larger schools.

5. The entire nation should be concerned with the type and effectiveness of the training given children in small school systems, since in those schools are many who will migrate to and become a part of the life in larger centers.

6. There are two avenues through which the small school system can be improved: (a) through improving practice within the framework of the administrative structure, and (b) through a fundamental reorganization of the administrative structure itself.

7. The superintendent of a small school system has a unique opportunity to render distinguished service, which will be of inestimable value to the nation, and he should be encouraged and urged fully to explore the possibilities for outstanding achievement in developing the smaller school system as a unique, vital and important factor in the education of the nation's youth.

Democracy, the Spiritual Way

THEODORE GERALD
SOARES, D.D.

Professor of Ethics
California Institute of Technology

WHAT shall we do with the unimportant man? In the aggregate the unimportant are valuable. They make excellent cannon fodder. They are needed for cheap labor; indeed, civilization is built upon them as a base. But the individual is insignificant.

There is on exhibition at a railway station in western Kansas a rusty old-fashioned coupler with the explanation that scientific advance has now saved the life and limb of the modern trainman. But it does not mention the long fight to obtain the expensive automatic coupler; it was cheaper for the railroads to defend the lawsuits of the maimed.

A distinguished Scottish preacher, in extolling the value of the classic discipline of his youth, admitted that the rest of the boys at school "had to take their chance." The efforts of the master were for the "lad of pairs."

We are becoming more humane. We want to raise the standard of living of the unimportant man, give him a simple education fitted to his station, obtain for him equality before the law, but we are anxious to prevent him from gaining political and economic control lest he bring our whole civilization to chaos.

It is significant that political philosophers from Plato to Hitler have not believed that the masses have the wisdom or can develop the wisdom to control society. Almost all of them have sought for some method to keep the direction of affairs out of the hands of the common people. But no other system has ever been successful. What benevolent despotism continued to be benevolent? What aristocracy ever failed to give chief concern to its own advantage? What oligarchy ever sought to conserve the good of the whole people? An acute English critic recently re-



Three New York City high schools have chosen this lithograph, "Bridges Over Harlem River," by M. Oley, an artist on the staff of the New York City Federal Art Project, as decorative and typical of the city: Evander Childs High School, Jamaica High School and the Joan of Arc Junior High.

peated the warning against allowing the thoughtful few to be governed by the thoughtless many, but what is to prevent the thoughtful few from being particularly thoughtful for their own interests?

Who is the unimportant man? We could easily point out those who are important, for while no man may be indispensable there are a limited number who are certainly necessary. We have seen a great nation devitalize its army by murdering its generals. The loss of as many privates would have been negligible. In that sense most men are unimportant.

But no one is unimportant to himself. A person is a value. He feels it and he knows it. When it was urged that the Negro should know his place, and keep it, a young man of that race asked quietly, "What is the place of a free man?"

Each person is important not only to himself but to the group, however small, to which he belongs. While he may not belong to the 10 per cent of our population who are fitted to receive training for major leadership, he may well be compe-

tent for minor leadership. We need corporals of the guard as well as generals of division. The family must have leadership. In a modern school a large proportion of the young people are capable of carrying some responsibility.

Practically all the unimportant people are educable. We do not know how far because we are only beginning to understand education. We, who call ourselves intellectuals, know something about educating younger intellectuals, but there are vast ranges of education that are not yet opened to school methods. Our decision that a child is not able to learn often means simply that we are not able to teach.

Every adventure into a significant human experience is education; every guide in such an enterprise is a teacher. The unimportant people have the right to be led into excursions that are significant to them and that will make them more important to themselves and to their friends.

When we are measuring the value of personality we ought to have M.Q. as well as I.Q. Even admitting that

we can really measure intelligence, we cannot thereby measure moral ability. And these, while not unrelated, are not identical. Jesus was contemporary with Philo. The latter was surely the greater intellect, but the Christian world follows the Carpenter of Nazareth. Kind hearts are not only more than coronets but more than certificates. We have all seen in unimportant people a beauty of soul, a nobility of character, a courage and a grace that put to shame many an intellectual giant. There are first that shall be last and last, first.

Then a social philosophy for today must begin with the significance of the individual human personality, spiritually conceived. If man is a biologic organism and nothing more, if he is a complex machine conditioned to certain behavior, then he may be treated as such, used and thrown aside; and particularly the stronger machines may exploit the weaker ones. But we are the children of a religious faith that does not believe that.

The Social Basis

Man is a child of God; man is a spirit capable of eternal life; man can grow ever more God-like. The whole meaning of human society is the opportunity for the higher and fuller development of this spiritual being. What else is society for? What other values are there? We have got man, nothing else; and no one is really unimportant if he has this spiritual capacity. We may not agree in our religious formulations but something like the religious conception of humanity is the only sound basis for a social structure. The tragedy of the world today is the abandonment of this faith.

There have been many attempts to express the spiritual meaning of human life. The Jews used a phrase which Jesus adopted, the Kingdom of God. The King was not a despot but a spiritual guide, "I will write my law in their hearts." Every citizen of the kingdom was equally a child of God, obligated so to regard every other. No one was unimportant but not all were equally endowed. Some had five talents; some, two; some, only one, but all were equal in responsibility to do their

best and in eligibility for reward according to their capacity to receive it.

Kant used the great phrase, the Kingdom of Ends. Every person is an end, never a mere means to another's end. We may subordinate animals even to their death for our ends, but not men. A society in which each individual had such intrinsic worth would be a kingdom of ends.

Man Is to Be Self-Ruled

As a designation of our society of persons we have agreed on the old Greek word "democracy." The Athenian believed that he was rational and free, not to be ruled but to be self-ruled. These assumptions were, unfortunately, not true and democracy became the rule of the demagogue. The great philosophers despised it. Yet the ideal survived. Man ought to be rational and free and self-ruled. The humanistic movement in France revived the concept. Our great Declaration affirmed it. All men are persons, therefore equally each is a value, not each is an equal value; each has a life that is dear to him, a liberty that means everything to him, a way of fulfillment that is good to him. Upon that equality of essential personality we have sought to build our national life.

Like all dynamic words "democracy" has grown beyond its etymology; it has become a way of life, a faith. Democracy, as we now conceive it, is such an organization of social life as shall progressively afford to each individual the largest opportunity for (1) the development of his own personality, (2) the contribution of his best to the common good and (3) participation according to his ability in the self-direction of the society. It means education, service, control; what he gets, what he gives, how he goes.

Rousseau with his fine insight saw that the decision of the majority was not true democracy but only a crude clumsy method of making necessary temporary decisions. We are only democratic when we find the general will. Nine-tenths of our common life as American citizens we never vote upon at all, and yet it goes as we all want it to go. The

other tenth bulks large in our thought because we have not yet reached a common agreement.

A family can be a truly democratic society with no voting but much discussion and cooperation, each for all and all for each. It is the sense of being a value and being part of the enterprise that gives spiritual quality to family membership.

We are seeking to make education truly democratic. Our emphasis on vocational guidance is the endeavor to help the young citizen to find out where he can most fully realize himself. The president of our senior university has recently expressed in a masterly way his appreciation of these new democratic developments in education. But, equally, the student of high intellectual promise must have his full opportunity and it may cost fifty times as much to educate him; and let us insist, such inequality is democratic, partly because he has the right to the fullest personality, partly because he will contribute so much the more. Democracy is not sameness but equal opportunity of growth.

Intelligent Democracy

Democracy in politics is the right of the individual to decide whether the social order is operating for the common good as he sees it. We should elect a few men whom we can trust and depend on them to govern, holding them strictly accountable. We should choose experts who would decide the many technical questions of government and require of them fidelity and efficiency. We should not vote on matters that we do not understand. It is democratic to accept wise guidance, provided we may choose the guidance.

In commerce and industry democracy means that the business is to be conducted for the common good, that of the owners, the workers and the consumers. Each party should have the opportunity of deciding whether the process is satisfactory and should cooperate in improvement.

It will be infinitely difficult to develop a true democracy but it is the only spiritual way of life. It will give us the only society in which a good man would wish to live.

The Dice Are Loaded—

In Behalf of Tradition and Stagnation

HARRY ELMER BARNES

Educator and Editorial Writer

EDUCATORS have recoiled before the actual implications of making education the leading means of promoting social improvement. They have formally subscribed to education as the prime agency of social reconstruction but have actually devoted their practical efforts to the inculcation of accepted tradition and to buttressing the existing social order.

The social purpose of education has altered down through the ages. In early society, education consisted chiefly in conserving the culture of the past and in transmitting the customs and the tradition of the community. This was a religious as well as a social duty. There was little thought of passing on the cultural tradition for the purpose of improving human society. It was assumed that the social order was the work of the gods and was as perfect as could be. The thought of altering the received tradition would have been in itself an act of impiety.

First to Question Tradition

The Greeks were the first to question this attitude, to criticize social tradition and to suggest that education might be the instrument of social reform and human progress. But such ideas were restricted mainly to the philosophical students of education and the actual education of classical times was devoted chiefly to transmitting and reinforcing the mores, institutions and ideas of earlier generations.

In the Middle Ages education was primarily given over to inculcating divine truths or had a practical end in training youth to participate dutifully and efficiently in feudal society or in the bureaucracy of the church or the state.

The eighteenth century "perfectionists" became the first important modern champions of education as an instrument of social progress.

However, we have come into critical times, when we must either make good our pretense to installing education as the outstanding agent of social leadership or else face the extinction of educational prestige, freedom and independence at the hands of dictators. In some countries, education too long delayed the assumption of its social responsibilities and has been engulfed in mass propaganda and paralyzing censorship.

Our public problems of today have become so complex and baffling that we can hope to solve them only through an enormous extension of educational facilities. Organized intelligence, which is only another name for education, would seem to be the only safe guide for contemporary society.

Results Are Not Applicable

As a general statement, one cannot quarrel with this assertion. But when we turn to the practical results of contemporary education, which costs us several billion dollars yearly, we find little to give us assurance that public education will lead us successfully out of our current difficulties.

The outstanding achievement in the field of education during the last century has been the provision of free public education for the masses. We have seen to it that everybody can go to school, but we have been far less wise and proficient in making certain that what our children study in the schools is of direct relevance to the solution of public problems. Since the days of Horace Mann, a century ago, we presumably have been educating the common man for the duties of citizenship in the contemporary world. Yet, the basic content of education still remains roughly similar to that which was deemed suitable for the

instruction of the children of European nobility three centuries ago.

If we are realistic, we must admit that our educational program has not even attained the horse-and-buggy stage. Rather, it is comparable to the days of medieval chivalry. Our curriculum is a strange mosaic, compounded of contributions made from the Stone Age to the days of Rousseau. The present educational heritage was built up in an age that knew neither democracy nor industrialism.

Curriculum Is Archaic

To be sure, there have been many novelties introduced into education since the days of Horace Mann, such as the social sciences, manual arts, vocational instruction and the ideals of Progressive Education, but these innovations constitute only a small part of the educational program and they are still viewed with suspicion and antagonism by "sound" educators. The majority of curriculum and educational ideals remain an archaic vestige from the old punitive era. Our educational offering is inadequate to train youth to live successfully in this age, to say nothing of being able to build a better future for their descendants. Even in the best systems of public education we fail to prepare children to earn a living or to become competent citizens.

Perhaps the most thorough study that has ever been made of contemporary education is the recent "Regents' Inquiry" into the educational system of New York State, the most expensive and admittedly one of the best public educational systems in the United States. In the official summary of the findings of this inquiry, Dr. Luther H. Gulick thus states the deficiencies of our current system of public instruction:

"The result is inescapable, the school system of the state of New York is now turning out a great number of youth each year, with and without diplomas, who are not adequately educated, who are not prepared to play a helpful part in the life of this State. Many are not ready to become citizens and to take a useful part in community and family life. Many are not ready to go to work and later to adapt themselves to shifting economic conditions. Many who should go on are not ready for advanced or professional education, not ready to pursue their own intellectual or technical development. . . ."

If this is true of the educational offering of the Empire State, it is not difficult to imagine the deficiencies of public education in our more backward and less prosperous states.

When we appraise existing education as the main instrument for planning a new social order, we find that it is even more deficient than it is in training youth for life in the present era. When we look upon public education from this angle, realistic observers must admit that it is, viewed in any broad way, literally a social liability.

Organized education breeds reverence for the present social order. It does not portray realistically the obvious weaknesses of our society, to say nothing of outlining a better social order and suggesting ways of bringing the latter into existence. It distinctly loads the dice in behalf of tradition and stagnation.

Mechanical v. Social Thought

Little fault can be found with the present status of technical education. But technology already has far out-run institutional development. The vast gulf between mechanical equipment and social thought and institutions constitutes the supreme challenge of our era. Our educational system has failed notoriously in accomplishing anything significant in the way of bridging this gulf. Indeed, it has actually helped to widen it through encouraging scientific and engineering research and, at the same time, censoring social criticism and discouraging social planning.

The only feasible way of bridging the gulf between machines and in-

stitutions, thus making our present social order workable and laying the basis for a better one in the future, is to extend the amount of attention given to the social studies, such as social biology, psychology, sociology, economics, government, education and esthetics.

But it will accomplish little if we simply go on teaching more of the old errors in these fields and continue inculcating a spirit of intellectual docility. We must first provide a realistic description and analysis of the present social order, resolutely exposing its seamy side. Social criticism is not the whole content of the social studies, but it is an important item in their program and one that has been notoriously evaded. Finally, the social studies must lay out the essentials of a better social order for the future and indicate ways in which it may be accomplished without revolution and violence.

It will, however, accomplish little merely to draw up the best possible prospectus of an adequate scheme of social studies, if teachers are not

permitted to set forth such a program unhampered by fear of discipline and dismissal. At the present time, it would be impossible for the average teacher in any typical community to present relevant instruction in the social studies over any protracted period and hope to maintain his position. Competent teachers must be assured a safe and permanent tenure. If they are able to obtain this for themselves without some coherent professional organization, so much the better, but there is little evidence at present to support the assertion that they can do so.

The problem of the social responsibility of education involves more than the improvement of education in the schools. It brings us directly to the issue of adult education.

The social crisis has become so immediate and intense that adult education seems to be our chief reliance in social change. We have seen that the conventional education in the schools and colleges is not well adapted to serving the cause of social change. Even if it were, some decisive form of action in the social crisis would have to be taken before present college students can assume any prominent rôle in determining public policy. Only adult education can bring about social change in an intelligent and peaceful manner at this time.

Education Must Indicate Reform

Much has been written of late about the relation of education to the defense of democracy. Democracy cannot be saved by phrases. If it is to be preserved it must be made to work, and this implies sweeping reforms in the present system of politics and economics. And education must resolutely make clear the nature and extent of these reforms and indicate the means of bringing them about.

The majority of educators and publicists who cry loudly in behalf of democracy would recoil in terror before the minimum facts as to the changes that are absolutely indispensable, if democracy and capitalism are to be made workable. If we are to preserve democracy through education we must be willing to teach those things that can save democracy.



"The Story of the Recorded Word," one of the color sketches being done for the New York Public Library by the Federal Art Project, Edward Laning, artist.

For Individual Needs

EDUCATION has no purposes. It is a term that describes the behavior of individuals and groups of individuals. When behavior is characterized by certain qualities, such as acting on thinking, we say that the individual is educated. When the behavior indicates other qualities, such as acting on impulse, we say that the individual is uneducated or perhaps infantile in his actions.

Education is the experience that enables the individual to exhibit intelligent behavior. The purpose is not in the education. It is not in the experience. It is in the efforts of the individual to shape his experience toward desired ends. Purpose, then, is intimately related to or bound up in human beings.

All individuals have needs that must be satisfied if they are to function normally. As the child grows up he finds himself beset by demands from the self within and pressures from the culture without. A feeling of necessity to do something about the disrupting situation is called "need." Consequently, a "need" is something personal to the individual. He sees it, feels it, thinks about it and acts to resolve it. In the process he utilizes pertinent experience and creates new responses for a more satisfactory management of the situation. These he incorporates into his growing aggregate of capital—meanings, values, attitudes and the like—for use in acting more intelligently in resolving subsequent needs. Thus he learns, and through learning he shows the behaviors that are called education.

Misguided Education

Purposes arise in the individual's attempt to satisfy his needs. Purposes are the goals set up by self-regulating individuals as a guide in satisfying their needs more intelligently.

Purposes set up for the child by adults outside of and unrelated to his felt needs in daily living are uneducative or miseducative. Aspects

L. THOMAS HOPKINS

Professor of Education
Columbia University

Is it miseducation that most pupils are now getting from primary through graduate school? Is the real problem of educational purposes still untouched?

of the culture presented to the child to study as adult-organized subject matter are equally ineffective in helping the child build better his own directing purposes and, consequently, represent misguided education.

Theoretically, the framework of our culture is plumbed by the democratic conception of life. This involves three principles of such importance that without them the structure would fall: (1) a profound respect for the worth of the individual man and a belief in him as a socially creative human being; (2) a belief that each individual has the capacity to learn how to act on thinking and a capacity to shape his behavior by purposes that build up increasingly intelligent action, and (3) a belief in the interactive process of living, the making of decisions through cooperative deliberation of those who must abide by such decisions. Taken together these three beliefs are the common denominator of democratic living.

When belief in the worth of the individual is denied, his liberties are curtailed and he becomes a tool of the dominating groups in the state. When belief in the individual's capacity to develop increasingly intelligent action is eliminated, he will no longer be educated to participate effectively in purposeful group action. When the interactive process

is blocked so that the individual's movements in the culture are restricted to a narrow one-way street, the respect both for his individuality and for his potential intellectual capacity is doomed.

This belief in the democratic way of life implies the education of each individual through his own problems of living within which arise his felt needs and his own purposes. By suspending judgment to make way for deliberative action he builds the social rather than the selfish life, he promotes the good life for himself and for others and he brings into his own living moral quality as he helps by the democratic process to attain a better life for everyone.

In the early conscious life of a child, purposes are simple. They deal with physiologic needs and are closely related to impulsive action. They may be grouped around such essentials as obtaining food, shelter, clothing, rhythm of activity and rest.

Purposes Expand With Years

As the child grows older and becomes conscious of the fact that his life must be lived with other people, his needs are conditioned by the culture so that his purposes become increasingly social in origin. He then suspends his actions in the satisfaction of his needs to contemplate the effect of possible behaviors upon others and the return effect upon himself. Observers say that he now wants affection from people, membership in social groups, a feeling that others believe in him and are working to help him regardless of his individual differences.

With increasing maturity the child begins to meet his needs by purposes involving increasing time and space relationships. He is not satisfied to use the materials at hand which lead to obvious conclusions. He searches broadly and deeply in the culture for new, fresh, better materials. He projects his purposing farther into the future, sees it more clearly in relation to his past experience. His chief concern, however, is still in resolving

the problems of life in the present. He wants to know how to change his relationship in the home to a more adult status at a time when his mother "does not want to lose her baby," but he is also immediately concerned about the future possibilities of getting a job, marrying, rearing children and becoming the center of a home life of his own.

The greater area he takes into account in meeting his needs and the more deliberative are his purposes, the more critical he becomes of the culture if the interactive process has been operating throughout his life. He sees that the good life for everyone is aborted through medieval beliefs, prejudices and unyielding institutions. He sees a need for remedying these conditions and his purposes may be extended to a dominating life activity of modifying these conditions to the greater good of everyone.

The chief obstacle to the conception of purposes under consideration is that adults may conceive of education as something which they do for their children or which the state does for all of the children. They may set up school systems to assume the management of such education. Those in charge of the school systems may think of education as something that goes on in a school-house six hours a day. They may think of its content as coming from books written by experts in the history of the culture. A number of these books in different aspects of the culture, when studied together, may become the school curriculum. The learning of the subject matter designated therein may become the minimum essentials of education. Thereafter, it is an easy step to say that the school has objectives, education has purposes, society has aims of education, the culture makes educational demands.

On this simple fallacy of reification hangs the miseducation that dominates much of present educational practice from primary through graduate schools.

An excellent illustration of this viewpoint of purposes is found in a recent statement on the purposes of education issued by the Educational Policies Commission. The foreword to teachers contains this paragraph:

"In this book your Educational Policies Commission has tried to do just two things. First, we have stated what we think the schools of the United States ought to try to accomplish. Second, we have described some of the things that we think need to be done if these purposes are to be realized."

This book seems to be written from the standpoint of the objectives or the concerns of education, the purposes of the schools, the demands of the culture. Human beings are considered largely from the end-view of an "educated person" who is functioning effectively in adult life. To develop this educated person the schools must be concerned with four



Mahogany lectern at Roxbury Memorial High School, Roxbury, Mass., carved by W.P.A. artists.

great groups of objectives: (1) self-realization, (2) human relationship, (3) economic efficiency and (4) civic responsibility.

These are carefully analyzed into many subdivisions and are clearly discussed from the standpoint of what an educated adult knows, believes or does in each area. Nowhere is there a consideration of the child struggling to meet his needs more intelligently through his own better conceived purposes. Nowhere is the democratic conception of living, so clearly defined in one section of the book, translated into a democratic means of helping the individual im-

prove his living at all age levels, from infancy to adulthood. Nowhere is education seen as a product of the purposeful, goal-seeking movements of persons, individually and in groups, trying desperately to meet their felt needs in a daily living more satisfactory for all concerned.

While this book has made a contribution in the objectives of education which it has selected and the clarity in which they have been discussed, the real problem of purposes is still untouched. Until educators can conceive of education as emergent in pursuit of evolving purposes by human beings at all ages, the present miseducation will continue.

This conception of purpose as directing the efforts of an individual to meet his needs more intelligently places far greater responsibilities than ever before upon educational workers. They must begin with the problems, needs and purposes that children see, feel and think about. They must see that the improvement of children's purposes becomes the central organizing principle of the curriculum. They must recognize that the increasing ability of children to solve their problems by taking into account more and more pertinent meanings makes the desirable life.

Since children's problems do not occur in a mental, physical, social or cultural vacuum, educational workers must help them obtain the "subject matters" necessary for intelligent action. This brings prominently into the situation other people, such as parents and members of the community in general.

But this meaning of purpose can become effective with children only as educational workers, parents and all others concerned with the development of children utilize it in their own living. They must put their own lives in order. They must improve their own processes of democratic living. They must help build the good life for every adult, for the learnings from their own purposeful growth help them guide better the process in the dynamic purposing of children. Such a conception of purpose motivates the learning of pupils, teachers and parents in many schools in America. To extend it to every school should be the dominating goal of all educational workers.

Industry's Democratic Workshop

ALLEN A. STOCKDALE

National Association of Manufacturers

AMERICA is a democratic nation. No true American wants it to be otherwise. The varied experiments of the world at the present time make this conclusion sound. All true Americans want the democratic way of life, cleansed of every fault and abuse and released to every power and advantage. For the most part those who come to live and work in our democratic society do so to enjoy its benefits, defend its philosophies and maintain its principles.

The American way is one of free and competitive enterprise. It is a great system, depending largely upon education, and puts personality at the center, freedom as the atmosphere, work as the secret of progress and true and just rewards as the stabilizing satisfactions and the enabling forces of continued and perfected efforts to better standards of living.

America Invited Progress

No economic planning authority ever could have foreseen, planned and organized such an amazing industrial progress as has been that of America in the last century. It could and did happen because of conditions of wide open invitation to all genius, inventive ability, organizing capacity, managerial skill and the dependability of character produced by freedom of education, religion and creative initiative. Dictatorship would have limited participation of thought and effort. Regulation and regimentation would have killed initiative. The state, supreme over the individual, would have resulted in subserviency to politics instead of inspiration to progress.

In the American free enterprise system one finds working together, for the good of the people of the nation, the Henry Ford business, owned by three, and General Motors Corporation, owned by 375,755

stockholders. In a democratic society the entire group of automotive industries has aimed for big volume, mass production and low unit costs.

It would seem that free competitive enterprise connected with education, free religion and creative initiative has been a blessing to the masses of people, enlarging and enriching their lives. Recent scientific research reveals that under our democratic form of life workers more than 40 years of age are valued in business and industry because of their experience, loyalty and dependability.

Free Enterprise

Our government may justly make some rules for our free enterprise game, but government, in a democratic society, does not go into competition with those who, for the good of society, play the game fairly and interestingly. Our American system of free enterprise is far more than just a way of doing business. It comprehends good sportsmanship; gives free play to the laws of supply, demand and competition; develops discipline, character and initiative; raises the standard of living, and improves the morale of the people. Free enterprise, at its best, must be entirely free, free from monopoly, private and governmental, free from government control and intimidation. In American democracy the people tell the government what to do, instead of the government telling the people what to do.

In the world today the battle is on between two ways of life. As vividly suggested by Mark Jones, a choice is demanded between two roads to a better world, one road is coercion, the other, education.

This second road to the better world is found in the conception of education. This is the road that American democracy has chosen.

In our American democracy almost one quarter of the population is in some way connected with educa-

tion, either as pupils or as teachers. In England it is 16 per cent, in France and Germany, 13 per cent, and in Italy, 12 per cent.

History shows us the cycles of rising and falling dictators. Experience reveals the collapse and chaos of the failures of man-made schemes and the cruel rulings of selfish though powerful persons. Democracy, with free enterprise and competition, gives us a record of 150 years of American constitutional government where business and industry, through the freedom and cooperation of educated individuals, have produced a nation of better health, better living and working conditions, more of life's good things, with higher wages to buy them. A nation with 6 per cent of the acreage and 7 per cent of the population, yet with 50 per cent of the railroads, telephones and developed electrical energies, uses 50 per cent of the coffee, tea and rubber, 66 2/3 per cent of the silk, 33 1/3 per cent of the coal, 66 2/3 per cent of the crude oil and makes 92 per cent of the automobiles. America is where most of the wealth is in the hands of a happy, educated people.

A Humanly Cooperative Way

This is our American heritage. Business has a most important rôle in a democratic society. Business is always seeking to serve in a better way a democratic public which is free to use and enjoy better service. For years communities have grown enriched by the profits of successful business. Industries have expanded upon their honest profits and free people have been enriched by the expansion. Wherever there are closed and dilapidated factory buildings there also are unpainted homes, depressing surroundings, a citizenry in dejection and the cultural and inspirational side of the people's life at low ebb. Business is the effort to create a better and richer life for the people. Democracy is the expression of the intelligence and cooperation of the people in that effort. There

is no way of speeding up the race without winding some runners. Democracy is not first and foremost a way of setting the pace to the indolent and easily satisfied. Democracy is a humanly cooperative way of inspiring the adequate to their best, stimulating the indolent to a better try and resulting in such success that the fruits of the whole may provide a humane program for that constant margin who either won't or cannot succeed in the risks and freedom of a true democracy.

The rôle of democracy is to keep all mind and soul capacities alive and alert that dreams and hopes and initiatives may not be killed or even deadened. The rôle of business in a democracy is to provide the opportunity to make jobs, produce goods, create incomes that will make the democracy free and released financially. When government expenditures become so great that taxes are a nightmare to the people and millstones to business, then the true and sincere democracy of citizenry cooperation is over and the enslave-

ment of public business and private personality has actually begun.

Even God does not take the rôle of dictator. Even God does not regiment his children. He allows them to take the risks of freedom, make the blunders of liberty and reap the rewards of physical labor, mental creativeness and spiritual struggle for character. God did not finish the world and turn it over to us to be used in idle, irresponsible security. He makes every day a risk and gives to every struggle the strength and discipline of character. He left us to discover the raw material, to learn the laws of procedure and put the world together as the years roll by.

He left the oil in Trenton Rock, the aluminum in the clay, the paper in the pulp, the electricity in the clouds. He left nature's forces unconquered, her laws undiscovered, her problems unmastered. He left music unwritten, poetry undreamed, dramas unplayed, history unwritten and the souls of men to work out their salvation with fear and trembling. This is the price of freedom.

comes the responsibility of all members of the school system to act in accordance with policies approved by the board, with the understanding that policies may be subject to review when it is deemed desirable or necessary.

One of the most outstanding elements in this philosophy of school administration is that the administrator can expect cooperation only insofar as his co-workers understand and share the aims of the entire group. This philosophy accepts the principle that collective thinking is usually better than individual thinking, and it proposes that all who are concerned with carrying out a policy should participate to the extent of their respective abilities in the formulation of that policy.

Participation is essentially an attitude of mind rather than a form of organization. It must recognize the rights of others and appreciate the contributions to be made by all persons qualified to render competent judgment. Participation in policy making does not in any sense eliminate the responsible executive; rather this type of procedure makes available to him the combined judgments of many different persons. The executive is still held responsible for the recommendations that he makes to the board and for the proper execution of policies that have been approved.

One of the greatest advantages of participation in administration is the recognition of the value of cooperative judgment through which stimulation is given to all employees to make their contributions, with a better understanding of administrative policy on the part of these employees.

One of the principal disadvantages is that the method is slow. Not all employees are interested in participating and many are not qualified to do so. From the standpoint of strict order, system and efficiency, democracy must yield the way to authoritarianism. However, if one is to consider the educational effect upon the individual, a cooperative plan for policy making is far superior. Industry has made some successful attempts to make use of the cooperative method of administration. Education may be able to point the way in this respect.

Participation of Personnel

OLIVER H. BIMSON

Assistant Superintendent, Lincoln, Neb.

THE first superintendents of schools in America were appointed in Buffalo and Louisville in 1837 and in Providence in 1839. The intervening century has witnessed an unprecedented growth in business and industry, as well as the development of large urban centers in the United States. Public school systems have kept pace with this growth and lay boards of education, realizing the technical and complex nature of school management, have delegated the administration of schools to a responsible executive. The superintendent of schools has thus been placed in a position of authority and responsibility.

One of the principal reasons for the development of autocratic procedures in school administration was the constant demand for efficiency which was placed upon the superintendent by boards of education and

the general public. Industry and the army furnished the only patterns of administrative procedure that were available.

A new concept is evident in school administration, providing for the participation of employees in policy formation.¹ This concept gives new interpretation to the work of the school administrator. The emphasis of his leadership is changed from that of authoritarian direction to the inspirational encouragement of all employees to make contributions for the welfare of the whole group.

The development of administrative policy offers opportunity for wide participation on the part of school employees. Recommendations of policy are made by the superintendent to the board of education. It be-

¹Bimson, Oliver H.: *Participation of School Personnel in Administration*. Published by the author at Lincoln, Neb., 1939.

The Convention News

March 1939

Administrators Gather, 10,000 Strong, for A.A.S.A. and 46 Other Conventions

Arthur B. Moehlman

More than 10,000 educators gathered in Cleveland from February 25 until March 3 for a series of 46 conventions and almost a dozen special conferences, with the meetings of the American Association of School Administrators, which alone totaled 250 sessions and included 700 speakers, as the chief center of attraction. Only the Progressive Education Association seemed to be missing. Its convention was held in Detroit prior to the Cleveland meetings.

The convention theme, as developed by President John A. Sexson, superintendent of schools, Pasadena, Calif., grew out of the three major contributions toward the formation of a comprehensive educational policy published within the last year by the Educational Policies Commission on the function, purposes and structure of public education in the United States.

Speakers of national and international reputation appeared on the big general programs that drew audiences of 5000 to 10,000 people twice a day to the municipal auditorium. Bertrand Russell, English philosopher and mathematician, appeared on the program of the Department of Secondary School Principals, and Jan Masaryk, former minister from Czechoslovakia to England and son of the first president of that republic, offered some significant thoughts on democracy while Ben S. Cherrington of the Department of State brought to the educators certain implications of the "good neighbor" policy of the United States to the South American republics.

Some of the Headliners

Secretary of the Interior Harold L. Ickes discussed the development and conservation of our natural resources and advanced reasons for the importance of creating a department of conservation.

Other headline speakers were Harry Elmer Barnes, historian and editorial writer; Allen A. Stockdale of the National Association of Manu-

Heads A.A.S.A. in 1939



Ben G. Graham, new president,
in an informal pose before the
convention hall in Cleveland.

facturers; J. A. Johnston, warden of Alcatraz prison; J. R. Drummond, editor of the *Christian Science Monitor*, and Wilbur S. Forrest of the *New York Herald Tribune*.

Other general features were the Sunday evening panel on the question, "Is the Press Censored?" and "America's Town Meeting of the Air." Much program emphasis was given to the need for federal aid and the National Education Association's plans to obtain it. The use and value of radio were featured not only in convention meetings, but also in the extensive broadcasting of convention features. Twenty-four coast-to-coast broadcasts were made on three national chains, on one of which Walter Hampden read a portion of Washington's Farewell Address.

While these performances in the "main tent" attracted the major attention of the press and visitors, the administrators were kept hard at work in special clinic and small panel and general discussion sections in the after-

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New President Views Needs of High School Youth and Democracy

"The totalitarian states teach the world one thing—the significance of education," in the words of Ben G. Graham, superintendent of schools, Pittsburgh, and new president of the A.A.S.A.

Russia, Germany and Italy have carefully planned programs to inculcate in the minds of their youth a philosophy of government, a fanatical belief that the individual exists only for the state.

If democracy is to live, free public education in democratic ideals is necessary, Doctor Graham declares. If an act of government is to be the law of the land, if an act of government is to be an act of the people, it is essential that the people be trained in these beliefs.

The problem of the secondary school student also comes in for emphasis by the new president. The reorganization of the curriculum on the secondary level is the most vital purpose of education today, he believes.

Increased leisure, unemployment, changes in family and church life, group living and propaganda have made the task of character building and of education a totally new thing. The schools have not kept pace with these changes, Doctor Graham declares.

Payson Smith Receives Award From Exhibitors

High tribute to Payson Smith as a statesman in educational administration was given by Alexander J. Stoddard, superintendent of schools, Denver, in making the presentation of the 1939 American Education Award of the Associated Exhibitors.

Those who so appropriately chose Payson Smith as the recipient of this award had in mind his qualities as an outstanding educator, Doctor Stoddard said, but undoubtedly they were actuated by other conditions as well. While it is true that our primary purpose is to honor him, it is equally true that we are paying tribute through him to that for which he stands. It is what

(Continued on page 35)

School Building Council Divides Its Time Between Federal Aid and Planning

The tenth annual conference of the National Advisory Council on School Building Problems, drawing much more audience attention than at any previous meeting, divided its sessions between consideration of the planning of secondary school buildings and continued federal aid for school building programs.

Dr. Mary Hayes, assistant to Aubrey Williams, national N.Y.A. director, told the educators and architects what youth was demanding of secondary education, while Dr. Chester F. Miller, superintendent of schools, Saginaw, Mich., presented the plans for the new Arthur Hill High School as an illustration of integrated community planning, carrying the project pictorially from the initial survey financed through C.W.A. to the completed building partially financed through P.W.A.

Describe Theater Planning

At the afternoon session, Lee Simonson, scenic designer and theater consultant, described the technique of developing a theater plan for secondary schools and Mildred Harter of the public school system of Gary, Ind., discussed possible educational programs for the completed high school theater. Arthur B. Moehlman of the University of Michigan presented "The Need for Continued P.W.A. Aid for School Buildings."

The council went on record unanimously favoring federal aid to public education through visiting federal agencies such as P.W.A. and W.P.A., both of which were commended for their efforts in stimulating essential school plant construction activities throughout the nation and thereby setting new standards for financially pressed school districts.

At the business meeting held at the close of the day's program the following officers were elected for 1939-1940:

Francis R. Scherer, Rochester, N. Y., president; Raymond V. Long, Virginia State Department of Public Instruction, first vice president; Arthur B. Moehlman, University of Michigan, and editor, *The Nation's Schools*, second vice president; David Weglein, Baltimore public schools, third vice president; Alice Barrows, U. S. Office of Education, secretary; W. F. Credle, North Carolina State Department of Education, treasurer.

Ickes Urges Teaching of Conservation in Schools; Also Conservation Department

College President Tells How to Select Better Teachers

Better selection of students by teachers' colleges and better self-selection are urged by President Frank E. Baker of State Teachers College, Milwaukee.

"There is enough evidence to prove that the profession of teaching is not drawing better than the run of the mine of the products of our high schools, and only the best are good enough to be educated for the profession that is so vital to the future of democracy."

Such selection for admission to teacher educating institutions as there has been has been based largely on academic standing. The kind of selection that will assure better teachers must be based on the more vital factors of personality, social intelligence, professional interest and cultural background.

A program based on these factors will have to be based on a cooperative arrangement with the public schools, involving cumulative records.

Doctor Baker thinks, too, that there must be more self-selection in the profession of teaching. This will occur, he states, only when teaching receives the social and financial recognition to which its importance in a democracy entitles it.

Furniture Withstands Tests

There could be no question about the ability of school chairs and desks to stand up effectively after the tests to which they were subjected in one manufacturer's display. It was a testing laboratory indeed staged in all the glamor of a circus wagon, brilliant red and white. Within, the visitor witnessed a veritable torture chamber for furniture. Chairs were receiving the impact test, the twist and torsion tests. Hinges were subjected to the cruelest strain. Auditorium seats were being tilted and bounced. And that is not all! Outside, in plain view of every passer-by, tests were being made on finishes! Boiling water, for example, was being poured for twenty minutes at a stretch on a lacquer finish. A cold water test ran forty-eight hours, and a test in which a 5 per cent solution of trisodium was being applied was due to run eighteen hours.

Are the waste and pillage and threatened physical destruction of our country less important than the names of state capitals? Is the pollution of a river by sanitary sewage and industrial waste less important than the location of that river on the map?

The secretary of the interior, Harold L. Ickes, thus challenged the A.A.S.A. on the topic of why conservation is not taught in the schools.

"Carry the reality of this problem into the schools, in living words and phrases, not as bone-dry generalities, and the problem of protecting our natural resources would be solved within a generation," Secretary Ickes declared.

The first half century of the conservation movement had to do with the protection of remarkable scenic areas by the establishment of national parks, the setting up of a national forest system and government protection of wild life.

Next came a partial awakening to the reckless waste of petroleum and coal. Finally, the American people have been forced to recognize that the greatest national possession of all, the land itself, is being destroyed through erosion and other causes.

Too Much Attention to Detail

In building up the agencies of government to carry on this broad but haphazard program of conservation, far more attention has been paid to detail than to the plan as a whole, the cabinet officer declared. In fact, "there has been no plan as a whole." Conservation activities that are closely related to one another are scattered among separated government departments, with neither rhyme nor reason to determine their location. This makes it harder to get rid of the old system of waste and despoilation.

The solution to the problem, in Secretary Ickes' opinion, lies in the creation of the office of Secretary of Conservation. This new government department would have charge of all the chief forms of conservation, except the soil conservation of lands in private ownership. The latter logically belongs, Secretary Ickes feels, in the department of agriculture.

Finally, in Mr. Ickes' mind, there is a great need, even greater than to teach conservation in the schools, to make all America a school in which to teach the conservation of democratic government to all the people.

Administrators Gather for 47 Separate Conventions

(Continued from page 33)

noons and in the informal "lobby-clinics" in their remaining free time. These afternoon gatherings consisted of small groups and were built around special topics of interest, such as "Propaganda," "Social Interpretation of the Schools," "Public School Business Administration," "Leadership" and "School Plant."

An unusual feature of the convention, developed partially in 1938 and greatly extended in the 1939 meeting, was the presence at each of these series of clinic meetings of a leader who was responsible not only for directing the discussion, but also for a summation and an appraisal of the meeting. This written appraisal of the entire convention was presented in printed form at the Thursday afternoon general session as a "Summarization and Implementation" of the convention.

The organizations participating in this largest and most important of the educational gatherings included: American Association of School Administrators, American Educational Research Association, National Advisory Council on School Building Problems, National Council of Education, American College Personnel Association, American Council on Personnel and Guidance, National Society of College Teachers of Education, National Society for the Study of Education, American Association of Teachers Colleges, Department of Classroom Teachers, Department of Elementary School Principals, Department of Secondary School Principals, National Vocational Guidance Association, National Council of Teachers of Mathematics, the American Council on Education, Educational Press Association, National Association of School Secretaries, Department of Supervisors and Directors of Instruction, Department of Adult Education, Department of Visual Instruction, National Advisory Council on the Education of Negroes, National Association of Deans of Women, and many other minor institutional or regional groups.

The enormous amount of detail necessary to run so huge a series of educational conventions as gathered in Cleveland last week is scarcely appreciated by even the most hardened convention goer. The credit for unusually fine staff work is due to Sherwood Shankland, secretary of the A.A.S.A., and to Belmont Farley for his capable organization of the convention publicity and radio programs.

Teacher Training Schools Have Inspired Elementary Education to Efficiency

Dr. Payson Smith claimed for the state normal schools and teachers' colleges credit for providing the inspiration and leadership that have brought the elementary school, "with all its admitted defects, to a decent state of efficiency" in a speech before the American Association of Teachers Colleges.

He reviewed the accomplishments of state teacher education during the last century and predicted that all institutions that educate teachers "must and will expand in purpose, will increase in scope of service and will grow in strength and influence."

His talk highlighted a special observance by the teachers' college group of



Payson Smith was this year's recipient of the American Award.

the centennial anniversary of the first state teacher training institution in America, the state teachers' college at Framingham, Mass.

In an address before the same group earlier in the day, Prof. A. L. Crabb of George Peabody College for Teachers asserted: "The time will come gradually when parents will rise above that witless state which permits the dull and unfit to teach their children."

Other speakers on the program included Roscoe Pulliam, president, Southern Illinois State Normal University, Carbondale; Frank W. Thomas, president of the state college at Fresno, Calif., and president of the organization; Dr. Frank W. Hubbard, assistant director, research division, N.E.A., and F. E. Engleman, president of the State Teachers College, New Haven, Conn.

Children's Vocabulary Found to Reach Astounding Total

Probably the most ambitious attempt yet made to discover the words most frequently used by children at each grade level was described by Henry D. Rinsland, professor of school measurements, University of Oklahoma, before the American Educational Research Association.

More than 6,000,000 words were counted in school papers done by children from grades 1 to 8 in some 700 schools and counties in every state, or 1 per cent of the elementary population.

First big surprise was the number of words found in the first grade papers—5103. In grade 8 papers, 17,925 different words were used by pupils. This is the largest number of different words ever found in children's writing.

The total vocabulary of 20,000 different words with the frequency with which each word occurs in each of the elementary grades will be published shortly.

Payson Smith Receives Award From Exhibitors

(Continued from page 33)

he has done and is doing, his philosophy, his ideals that we honor tonight. It is because he represents so much that is worth while in American life, so much that we ourselves aspire to achieve, so much that we cherish for our schools, that we pause in this manner to salute him.

"It is because Payson Smith has raised his voice so vigorously during this generation in protest against every suggestion of possible federal control of our schools that he has come to personify this struggle. The inequalities of educational opportunity in America are a matter of common knowledge and the necessity of federal aid is generally admitted. But if the price of such aid is even the first step toward federal control of our schools, or even the beginning of the denial of the principle of local initiative and control in our educational scheme, we shall continue to refuse to barter on that basis.

"It is because Payson Smith stands for this long struggle to retain the traditional status of the public schools in the American democracy, to preserve the spirit of that democracy and to maintain the independence of these schools in performing their unique function, that we honor him here."

Frank Gregor Jr., president of the Associated Exhibitors, presented the award to Doctor Smith.

Actual Application of Products to School Use Is Manufacturers' Exhibit Theme

There was "eye" appeal aplenty in the exhibits that taxed the spacious auditorium at Cleveland. This was to be expected with such a theme as "Application to Purpose" happily selected and closely adhered to by some three hundred exhibitors.

With striking effect products were shown for the most part in the light of their actual application to school use. Many of the displays were brand new; other familiar settings had been retained but with fresh trimmings; all were arresting, compelling and designed to tell their story.

This trend toward practical visual exhibits, which in some instances was sufficiently comprehensive to cover the whole school plant, marks a new high standard for displays of this type. Everywhere the visitor turned there was something to attract his attention. To make these showings of even greater interest there were seminar rooms in which sectional meetings were held on various topics, such as visual instruction and finance, all tying in with the general theme of the big show.

Variety was even more apparent than in previous years. Everything from pen points to travel tours could be found somewhere among the maze of displays. Again the textbook publishers topped the list. They also ranked well up front in showmanship. What more effective setting to show books for example than a replica of the Little Red Schoolhouse with book bins filled to overflowing with all the confusion that appeals to every book lover. In another exhibit monster volumes formed the background, bearing titles that could not be overlooked.

Stream of Pennies

Manufacturers of cleaning chemicals outdid themselves in supplying eye appeal. In one such exhibit a stream of pennies rolled endlessly before the eyes of the visitor, attesting to the economies that he might expect. Elsewhere the interior of an entire school was set up in miniature depicting modern cleaning methods as applied to the cafeteria, locker rooms, gymnasium.

Mural photographs, revolving pictures and modern lighting were employed more generally than ever before, with plenty of color thrown in. Color, in fact, was everywhere—in the displays as well as in the products on view. Influence of the modern was

evidenced in the bleached finishes now available in school furniture. Oyster white even was revealed in home economics equipment.

Certainly the manufacturer of school seating who staged a laboratory in which desks and chairs alike underwent the severest tests, described elsewhere in detail, deserves credit for an original idea executed most effectively. Another seating manufacturer told his story in seven large volumes stacked across the back of the exhibit, each one illustrated with a lighted inset showing a specific model.

There were playground equipment and athletic equipment, even to rubber soled shoes designed to provide the right posture foundation. Washing facilities, too, were not overlooked, particularly as provided in generous circular fountains. But, as indicated at the start, it was that kind of a show, with something for everybody and with demonstrations to show the products' functional purposes.

Child Development Person Has All Round View of the Child

Two contrasting pictures, that of the child development person and the educator, were drawn by John E. Anderson, director, Institute for Child Welfare, University of Minnesota, in an address before the National Society for the Study of Education.

"Trained primarily in research, the child development person takes an all round view of the child and considers education an incident, though an important one, in the forces that fashion the child. Although concerned mainly with normal children, he also studies abnormal and exceptional children. He uses the tools of statistics and the experimental method and has forged new observational technics. His essential point of view is more closely allied to that of the parent, the counselor or the clinician than to the point of view of the educator.

"On the other hand, the educator is interested in teaching materials and methods of instruction. His background is the curriculum. He constantly makes decisions as to what shall and shall not be taught. He moves in the field of action; he cannot wait upon the latest scientific knowledge before meeting the problems of the multitudes of children that pass before him."

Bertrand Russell Tells Business of Public Education in Democracy

The kind of education that is necessary if democracy is to succeed draws a curiously difficult line psychologically, because it needs two things that tend in different directions, said Bertrand Russell, the eminent English philosopher, in an address before the department of secondary school principals.

On the one hand, every man needs to have a certain degree of self-reliance and self-confidence, a certain willingness to back his own judgment and to set forth his own point of view, to defend it, to do propaganda for it, to organize the propaganda, if necessary; all the ordinary business of democratic politics implies confidence in one's own judgment.

On the other hand, if democracy is to be workable, a man must be willing to submit to the authority of the majority when that authority goes against him.

The business of education in relation to democracy, Lord Russell said, is to try to produce the type of character that is willing to advocate its own opinion but that also is willing to submit to the majority when it finds the majority going against it.

"I should like to see people exposed in schools to the most vehement and terrific argumentation on all sides of any question," the British earl declared. Democracy must construct an education designed to counteract the natural credulity and the natural incredulity of the uneducated man; because the uneducated man has these two opposite defects: he believes a statement when no reasons are given for it, and equally he disbelieves it when reasons are given.

Jewelry Craftsmanship Shown

These modern days are not so different, after all. That is if you're thinking about jewelry craftsmanship. They use much the same methods now as they did in the late nineteenth century, only today we have power. This was demonstrated at the convention in the complete working model of an old-time gold and silversmith shop, showing small figures at work on various operations. The visitor gazed with interest upon miniature machines in operation, water running from tiny taps and a clock pendulum oscillating. All to show, of course, the meticulous care used in producing modern trophies, silver cups, class pins, and other school jewelry.

Scholarships Called Racket in Which School Administrators Are Involved

The giving of college scholarships has become a downright racket in which both high school principals and college administrators are involved.

The foregoing charge was made by several speakers before the American Council of Guidance and Personnel Associations.

American colleges are using scholarships as a bait for students, regardless of financial need, athletic ability or potentialities, it was declared by Milton C. Towner, director of admissions at Lawrence College.

"As a result many students endowed with talents for an engineering career have been recruited for liberal arts colleges," he charged, "and other misfits have resulted from high pressure salesmanship on the part of college representatives."

E. W. Hale, director of personnel at Beloit College, described the work of

the newly organized Association of College Representatives with membership from 50 institutions of higher learning willing to subscribe to a code of ethics when it comes to scholarships.

Under this code scholarships are given only to pupils in the upper tenth of their classes and only if they are in financial need of a scholarship.

Honorary scholarships without stipends are given to pupils not needing financial aid, and grants in aid are given to serious minded pupils of promise without extraordinary high school rating who are deemed good college prospects.

"High school graduates whose parents have money for their college education and who accept scholarships are accepting graft," Mr. Towner declared. "They are depriving of a higher education serious-minded youth with high I.Q.'s who haven't funds for college."

Wright Tells of Big Gains in Vocational Education Classes

The enrollment in vocational education classes in secondary schools that are aided by federal grants totaled 1,810,150 during the last fiscal year, Dr. J. C. Wright, assistant commissioner for vocational education, said in reviewing some of the highlights in vocational education during 1938 before the A.A.S.A. department of vocational education.

This is an increase of 313,000 over the previous year, Doctor Wright said. It includes 461,000 persons receiving instruction in vocational agriculture; 686,000 taking training in trade and industrial classes; 627,000 attending home economics classes, and 36,000 in training for distributive occupations.

Doctor Wright said that approximately 8,500,000 persons are employed in various capacities in distributive occupations; that each year approximately 150,000 youth from 18 to 19 years of age find their first employment in this field, and that 130,000 workers between the ages of 20 and 24 enter the distributive field from other kinds of employment.

Last year, Doctor Wright said, the states as a whole spent from their own funds for vocational education of all types, \$1.54 for every dollar of federal money. In the field of industrial education the states matched every dollar of federal money with \$2 of state money.

Monitor Editor Declares News Too Highly Colored

A conviction that the American press is overwhelmingly free but that it too often uses its freedom unfairly was expressed by J. Roscoe Drummond, executive editor, *Christian Science Monitor*, in addressing a panel discussion on propaganda and intellectual freedom.

"There is too much coloring of the news in the news columns of too many newspapers. The news must be improved and strengthened if the American press is to fulfill its urgent function in democratic government. The press can afford to have no loyalty above loyalty to its readers.

"Freedom of the press was not written into the American constitution either for the convenience or for the commerce of newspaper publishers. It was imbedded into our democracy in order that the press might serve democracy.

"It is no drawing room theory," he continued, "that democracy is undergoing deep trial and testing. Today as never before the American newspaper needs to serve its readers with a news service that is accurate, balanced and complete. Newspaper publishers must defend the principle and the right of a free press with a more responsible and trustworthy use of freedom. We need not better words, but better newspapers."

Cunliffe Heads Guidance Group

The National Vocational Guidance Association elected as its president Rex B. Cunliffe, associate professor of education at Rutgers University. Mary P. Corre, director of occupational research of the Cincinnati public schools, was elected vice president. Elected second vice president was George E. Hutcherson, supervisor of vocational education, New York Department of Education.



One of the six afternoon discussion groups has just let out.



Wm. H. Kilpatrick



Mrs. Pettengill



Luther Gulick



Lyman Bryson



F. L. Bailey



John A. Sexson



F. W. Reeves



Edmund E. Day



Ward G. Reeder

"Democracy" Was the Word Speakers Liked Best to Employ



Caroline Woodruff



G. N. Kelauger



L. J. Brueckner



Charles H. Lake



L. Thomas Hopkins

Reeder Tells Controls That Must Follow Federal Subsidies to Schools

Two arguments for federal control of subsidies to public education are the danger of pauperizing the states and of continuing, if not increasing, the waste of school funds, according to Prof. Ward G. Reeder of Ohio State University, who opposed Dr. Howard A. Dawson in a debate on the question of federal aid and control before the American Educational Research Association.

"Just as individuals may become paupers through depending upon gifts from their relatives, the public or some other source, so states may become paupers through depending upon gifts from the federal government. The pauper's complex may be adopted eventually by the strong as well as by the weak, and when that time comes every state will experience a decreasing interest in the schools," Professor Reeder said.

As for the other danger, he stated that "it is bad enough to permit local and state funds to be wasted without pouring federal funds into the same 'rat hole,'" and predicted that "funds which come from the federal government are not likely to be spent as efficiently as funds which are raised by the state and the local community" unless restrictions are placed upon their use.

He chided the N.E.A. and the A.A.S.A. for still resolving for "federal aid without federal control" and lauded the President's Advisory Committee on Education for its "statesmanlike policy" in recommending that there be "a limited amount of control, directed primarily at honesty, legality and efficiency in the expenditure of federal funds."

In concluding his address, Professor Reeder recommended the following as the chief federal controls which should be established:

1. That the federal appropriations be earmarked for special educational purposes, following the recommendations of the advisory committee: general aid to schools, teacher preparation, school building construction, adult education, rural library service, state school administration and research. Contrary to the recommendation of the committee, Professor Reeder would stipulate that federal funds be used only for public schools.

2. That every state which receives federal support should establish a general state board of education responsible

for the expenditure of federal funds according to law, provide for an efficient system of financial audits, enforce compulsory attendance laws, provide for a minimum school term throughout the state, not discriminate among the races in the allocation of funds, employ only teachers who meet standards of preparation and maintain state and local support at a level at least as high as before federal funds were granted.

3. That the U. S. commissioner of education be empowered to withhold funds from any state which did not comply with federal requirements for support to education.

Cleveland Teacher Lists Advantages of Classroom Radio Lessons to Pupils

"The commercial radio programs do not subject an unwilling audience to a broadcast just to educate them or lift them. No more should our educational broadcasts," Lillian Wennestrom, a teacher in an observation school, Cleveland, said in describing education by radio in Cleveland before the department of supervisors and directors of instruction.

Expressing belief that the entire school program revolved around a radio schedule, when it was used for classroom instruction, the speaker enumerated the advantages of classroom radio to the teacher.

1. The radio lessons provide a substantial introduction to a new course of study. This is especially true of a transferred teacher or a new subject to a teacher. In many cases the radio lessons are as helpful as a course of study in the teaching of the subject.

2. The materials are well organized and this aids the teacher in her plans.

3. A variety of methods is presented which, if applicable to the group, may be copied or adjusted to other classes, such as drill, tests and pupil participation.

4. Radio lessons move faster and with more snap and may well be called demonstration lessons. As such, they show how to hold the class interest.

5. Much time on the part of the classroom teacher is conserved for individual study.

Among the disadvantages she listed time limit of fifteen minutes, the wide range of mental abilities and teacher dependency upon the radio lessons.

Radio Facsimile Teaching Demonstrated at Cleveland

As the first city to explore the possibilities of the radio facsimile, Cleveland demonstrated this new instructional medium to the country's educators during the convention by means of the board of education's ultra-high frequency radio station WBOE.

Printed lesson instructions and assignments, bulletins, maps and drawings were flashed into four city schools by radio facsimile, demonstrating the educational possibilities of this system developed in the R.C.A. Victor laboratories.

During the experiment a "scanning" device, developed under the direction of a R.C.A. research engineer, was installed in the radio studios in the board of education building. Material prepared by the city's school authorities was transmitted from there into the four schools.

"Through this facsimile transmission, Cleveland is the first city to explore the possibilities of an extremely important means of communication which has applications not only in the school and the home, but also on shipboard and in airplanes for the transmission of weather maps and meteorological information, in police work for identification purposes and in industry for a multitude of uses," said Ellsworth C. Dent, R.C.A. Victor educational director.

Newest in Radio and Sound

Equipment providing two channel radio and sound distribution for from 20 to 120 rooms was demonstrated effectively at the convention with other models against a background with photo montage treatment which provided just the proper setting. This particular unit is available with an attachment for instantaneous recording and reproduction of transcriptions and with a chimes unit to be used for signals as required. The companion exhibit was a small school sound system designed to accommodate from 10 to 40 rooms with radio and sound distribution.

Developing Right Attitudes

"Right attitude is caught not taught. It breeds most prolifically in an atmosphere of freedom with guidance suited to the age and circumstance of those involved," Paul M. Munro, superintendent of schools, Columbus, Ga., said in discussing the development and management of attitudes. "The public school offers the ideal breeding place," he declared.

Most Extensive Broadcasts Covering Any American Convention Sent From Cleveland

Even administrators who remained at home this year could not evade the verbosity of the convention halls, except by a twist of the dial, for the most extensive series of broadcasts ever covering an American convention was radiocast from Cleveland over three national networks. In all, there were 24 programs sent out on national radio hookups.

Several well-known educational programs that originate in New York studios were moved out to Cleveland for the occasion so that schoolmen might watch the varied technics used in preparing and presenting educational programs.

"People's Platform," "Americans at Work," "American School of the Air," "American Viewpoints," "Adventures in Science" and "Of Men and Books," all regular C.B.S. features, were broadcast in conjunction with the convention. All but the last named program originated in Cleveland. "Of Men and Books" originated in Chicago but was concentrated on books of interest to the delegates.

For the first time, the N.B.C. Blue network program, "Town Meeting of the Air," was moved from its New York home. In addition, the N.B.C. Red and Blue networks presented the following speakers: President Sexson; Harold L. Ickes; Jan Masaryk, former minister to England from Czechoslovakia; Ben G. Graham, president elect of the A.A.S.A.

Harry Elmer Barnes and A. J. Stoddard spoke on the Mutual network.

"Americans at Work" on the Columbia network dealt with the national pastime among school children, hookey-playing. The story of the first American schoolboy who played hookey in the spring of 1633 and the punishment meted out by a stern Dutch schoolmaster was told in interviews and dramatizations.

Lyman Bryson of Columbia University brought his program, "People's Platform," to Cleveland and among his guests for the broadcast were Malcolm S. MacLean, University of Minnesota; J. R. Drummond, executive editor of the *Christian Science Monitor*; Wilbur S. Forrest, assistant editor of the *New York Herald Tribune*; Clyde R. Miller, Institute for Propaganda Analysis, New York City, and A. J. Stoddard, superintendent of schools, Denver.

Even one regular entertainment program was devoted to education during

the convention week. Lum and Abner, well-known pair from Pine Ridge, Ark., advocated more and better rural schools in remote sections of the country in one of their broadcasts over the Columbia Broadcasting System.

Counts and Reeves Address National Education Council

The two day session of the National Council of Education was devoted to a discussion of "The School and the State in American Democracy," by Dr. George S. Counts, Teachers College, Columbia University, and "The Report of the Advisory Committee on Education and Impending Legislation" by Dr. Floyd W. Reeves, University of Chicago, chairman of the Advisory Committee.

Doctor Counts developed a masterly exposition of the importance of education and its relation to democracy in seven theses, while Doctor Reeves analyzed the need for federal aid in terms of the committee's already published findings and recommendations to the council.

Vocational Guidance Experts Must Resort to Politics—Tead

Deploring the small progress the vocational guidance profession has made against the tide of unemployment, Ordway Tead, chairman of the New York City board of higher education, said the trend toward some measure of public planning of production "seems unmistakable."

Mr. Tead predicted that government-controlled planning or government-operated enterprises, "yardsticks" for employment, wages and output by private industry may soon be an inevitable necessity for smashing the present vocational vacuum. Mr. Tead addressed the annual banquet of the National Vocational Guidance Association.

The vocational guidance profession, he contended, must go militantly into the field of practical politics to help bring about practical action toward planned control of production and business cycles.

He urged the association to become a potent factor in bringing about intelligent collaboration between trade unions and employers, asserting that the country today was permeated with the attitude that workers are "means to the ends of corporate strength or union strength."

Progressive Education Needs Salesmen

"Progressive education does not need lawyers to plead its case. It needs salesmen who can sell it."

Paul J. Misner, superintendent of schools, Glencoe, Ill., made the foregoing statement in a talk before the Progressive Education Association which met in Detroit in advance of the A.A.S.A. meetings in Cleveland.

One of the features of the meeting was a 59 page report of the committee on philosophy of which Dr. Orville G. Brim of Ohio State University was the chairman.

"We have come to see," the report states, "that the total culture, not merely the school as an agent of it, plays an educative rôle. Germany has recognized this principle and made good use of it in furthering Nazism."

Dr. Herbert R. Stoltz, individual guidance director in the schools of Oakland, Calif., discussed the rôle of parents in the education of children.

"Parents must first put their own lives in order if they are to present a relaxed attitude toward their children," Doctor Stoltz declared. "Children

should not be pushed too hard but urged to relax and exercise alternately with work."

A joint meeting with the John Dewey Society was presided over by Dr. Harold Rugg of Teachers College, Columbia University. The theme of this meeting was "Democracy and the Curriculum."

Dr. Alice V. Keliher, of New York University, as chairman of the committee on human relations, declared: "We must bring our culture out of the subconscious where we can examine it. We must encourage children to ask and test and experiment."

Dr. Edna Amidon of the U. S. Office of Education told of four communities in which the schools and other agencies are centering their efforts on education for home and family life. These are: Wichita, Kan.; Obion City, Tenn.; Box Elder City, Utah, and Toledo, Ohio.

Dinner speaker at the meeting was Erika Mann, daughter of Thomas Mann, the author, and a refugee from Germany.

Why They Like Comic Strips

Aunt Het's prediction that "folks that dig up our civilization are going to learn more about us from our comic strips than by looking at ruins" may be poor prophecy, but the comic strip remains a distinctive and revealing feature of our American culture.

So revealing, in fact, that Prof. George E. Hill of the University of Pennsylvania set about to study the nature of children's interests in comic strips. His report before the American Educational Research Association, both on his own research and on that of other educators, he summarized briefly in three main points:

1. Reading the comics is one of the most common leisure time interests of children of the fourth, fifth and sixth grades.

2. Children like comic strips primarily for the adventure, excitement and action portrayed and, secondarily, for their humor.

3. Children's interests in comic strips are similar to their interests in reading, in the radio and in the movies.

This has been but a preliminary study, Professor Hill said. We need a much more thorough analysis of this field. Certain studies are now under way which will extend our knowledge of the field somewhat. Beyond these studies, he believes there should be a further analysis for measuring the effect of the comics on the child's conduct and speech. An analysis of the ethical content of comics and technic for measuring understanding are under way.



Three familiar figures—J. B. Edmonson, S. D. Shankland and Jesse Newlon.

Consumer Mathematics Is Predicted for Near Future

The day of abstract mathematics is definitely past. Unless it is made immediately usable for the pupils, it isn't worth the teaching effort.

The National Council of Teachers of Mathematics seemed agreed upon the foregoing ideas. This group came face to face with the serious decline in interest in their subject matter and they courageously took the blame upon themselves. Poor teaching, they admitted, was the chief reason.

Willard Beatty, director of Indian education, declared:

"One of the biggest difficulties with mathematics has been the failure of teachers to give realistic problems. Modern children are just as willing to work as any before them, but they want to know where it is going to fit into today's need. Mathematics must cease to be

the toy of the intellectual aristocracy if it is to be a powerful tool for the masses."

John W. Studebaker, U. S. commissioner of education, predicted that in ten years it will be mathematics of the consumer that will be offered in the junior high schools of the land. All mathematics teaching will be of genuine social significance.

A man who won much applause was Prof. W. S. Schlauch of New York University, who described how mathematics is necessary in routine operations of business, in management and in private life.

Languages Conquered

No less than twenty-three languages can now be taught most effectively through use of records. Excellent for school use as well as for supplementary equipment in the home! That is what large groups of people decided who listened to a clear pronunciation of words forming sentences which they followed in convenient little books provided for that very purpose. The same lessons are set up in chart size for school use. Portuguese is the latest to be included, and even Arabic is within the realm of possibility.

Color in the School

Color can be achieved in all manner of ways, through the use of decorative tiles, glass window panes treated with amusing figures in color, draperies of proper texture and pattern, and, of course, harmonious wall treatment. The entire story was told in the convention display staged by a well-known architect, the only one exhibiting, in fact. There were samples in great variety which the visitor was privileged to inspect at his leisure, and many found in them, as well as in the attractive water color sketches of schoolrooms lining the walls, much to ponder over.

Perfect, Not Passing, Grade Necessary in Simple Arithmetic, Says Guy Wilson

Anything less than perfect is not good enough as a pupil score in numbers, spelling and language usage.

Old grade averages of 75 per cent or even of 85 or 90 per cent are not satisfactory in simple useful arithmetic, according to Guy M. Wilson, professor of education, Boston University.

Take the common run of adults. As many as 85 per cent of them make mistakes in simple addition, subtraction and multiplication. Upper grade and high school pupils are but little better.

The reason for all of this, Doctor Wilson has decided, is in the teaching. The average teacher does not know how many addition facts there are and has never developed an efficient teaching plan on any process.

In an address before the American Educational Research Association, Doctor Wilson made these suggestions:

1. Don't start arithmetic too soon. Children should not undertake number drill until they have some real desire to learn because of actual need.

2. Don't carry the drill procedure too far. Take plenty of time for addition, multiplication and subtraction. Any fractions that will be used in adult life are very simple.

3. Don't accept standards that are too low to have any value. Test only on essential drill and then the scores should be perfect.

The Boston professor was slightly encouraging in saying that pupil results in arithmetic tests are better than they were a few years ago.

School Publicity Often Far From Democratic, Supt. Moffitt Contends

The newspapers of Germany and Italy are probably not more censored than our own school newspapers.

So asserts Supt. Frederick J. Moffitt of Hamburg, N. Y., in speaking of direct publicity.

School publicity must be democratic, among other things, Mr. Moffitt contends.

"We salute this portion of our public relations program vociferously and yet many of us sit with blue pencil in hand and frown on any attempt of the staff to interpret the school. We do not need to turn our direct publicity over to inexperienced and incompetent hands, but we should give time and cooperation to the school staff in its attempts to help with school publicity if we really want that help."

Besides being democratic, school publicity must be streamlined, far-sighted, positive, practical and must stress the large objectives in education, according to Mr. Moffitt.

The school executive is so sadly out of date that he believes we must speak to the public in terms that a sixth grade pupil can understand. If we take the "sixth grade" concept literally, we are likely to lose most of the value of our publicity.

Another error is insistence on the avoidance of all methods and materials that have the slightest suspicion of propaganda. "In this day when all the forces of evil, and most of the forces of good, have to borrow some measure of propaganda, the school is going to be left a long way behind if it really believes it can eliminate all propaganda from its direct publicity program," Superintendent Moffitt says.

Trivial Publicity Bad

Direct publicity is one of the most harmful things that can happen to a school system, if it is vicious, unthinking, undirected or just trivial, Mr. Moffitt believes. The purely trivial publicity is just as bad as the vicious.

The possibilities of the use of radio for direct publicity in even the smaller school systems are almost endless, this speaker believes. Not many have studied the possibilities of the school's sending out its own radio messages to the public, yet at least five comparatively small systems have excellent sending stations of their own.

Another channel of direct publicity that has been neglected is the public forum. Through the public forum the



John Erle Grinnell gives views on philosophy of school publicity.

schools may harmonize cultural differences, avoid social conflicts and tell their story in truthful, sincere form.

Santa Barbara Teachers Increase Social Understanding

The school system of Santa Barbara, Calif., has three methods of increasing the social understandings of its teachers, according to Lillian A. Lamoreaux, director of curriculum and instruction.

1. Through widening teachers' experiences. One device is an occasional evening spent with some of the foreign groups in the population, at which the group gives a program showing native cultures. Another is to put a teacher in charge of some of the parent groups that desire an understanding of school practices.

2. Through teacher participation in curriculum building. Teachers are periodically released from the classroom to work with administrators and curriculum consultants. Teachers' meetings on different growth intervals are held. The teachers are taught to analyze their classroom experiences to see that they are well-balanced.

3. Through refinement of classroom technics. Four major activities have been carried on: (a) teacher-discussions and teacher-demonstrations on planning and evaluation at different school levels; (b) demonstrations by specialists; (c) interschool and interclass visitation; (d) teacher practice in the same manipulative experiences that the pupils are expected to carry on in the classroom.

Dean Grinnell States Policy of Interpreting Schools to Community

From the board of education to the scrubwoman extends the hierarchy of responsibility for school interpretation, in the words of John Erle Grinnell, dean of instruction, Indiana State Teachers College, Terre Haute, Ind.

The teacher is at the very heart of the interpretation program, Dean Grinnell thinks. For most people the teacher is the school, and under normal conditions most of what the public learns about the school comes from the pupils through the teachers.

Because teachers are nearest the pupils, they are nearest the parents. They are first to sense public approval or disapproval.

The first step in a program of school interpretation is a "know your school program" that starts with the teachers and other school employees. Teachers may be kept informed through a house organ and loose-leaf teachers' handbooks.

Exhibits and demonstrations have been well used to interest citizens in the work of the school. For the many people who do not come to school for Visiting Day or Education Week, the demonstration may be taken downtown.

Moving pictures of school pupils at work may be exhibited before interested groups in church, service clubs, fraternal orders or community halls.

There is need for more ingenuity in developing local radio programs that will appeal to the public while teaching essential facts about school activities.

The parent-teacher association is an agency too long allowed to be aimless and even destructive. Now it is becoming the foremost agency in bringing parents and teachers together in democratic study of school problems and activities.

As a concise statement of policy regarding interpretation of the school to the public, Dean Grinnell gives the following: "Understand the needs of the community and see that the community understands what the school is doing to meet those needs."

Makes Books Lie Flat

Everyone knows the difficulty of getting work books to lie flat on the desk. That is why a new ring binding shown in the Auditorium attracted so much attention. It is quite simple and effective, assuring a better break for book and reader alike.

Teachers to Have Time to Be Patient With Poorer Type of Pupil

Can we not urge government agencies to invest in the human resources of this country? Is that not far more important than investment in our natural resources?

This challenge was hurled at school administrators by one of the few women superintendents to head a large city school system, Mary B. McAndrew of Carbondale, Pa.

"A land that is poor in natural resources may be among the leaders of the world if its people are really worth while," she said in deploring the declining birth rate in this country and its subsequent weakening of the economic and social fabric of the nation.

"Statistics prove we can expect more and more children from the low quality citizen. We must accept them, but I say, let us welcome them. The children of the low quality citizen come into the world undefiled, but receptive, and it is society that is making criminals of them.

"Teachers will have time now to have patience with them. Let us give them the best the school has to offer. Let us start their training early. Small towns and rural areas have only one out of every 147 enrolled in kindergarten," she pointed out.

Turning to other problems of modern education, Miss McAndrew enumerated other ways in which the nation might conserve its human resources: by giving opportunity to talented pupils, vocational guidance for high school age youth and vocational reeducation for youth out of high school.

"I have not a doubt but that the root of every tragedy is the lack of education. Planning seems the only answer for all our problems; studying the trends of the last ten years in our particular community, noting the decline of the birth rate, the shift in population, the annual enrollment, the enrollment in private schools, the number enrolled in schools of higher learning, the number handicapped, the regional scholarships, the permanent industries, the unemployment, the leisure time facilities, the absorption of white collar workers and the need for vocational training.

"The task of school management will be to provide as harmonious a readjustment as human ingenuity can devise. It will succeed only insofar as it wins the support of the taxpayers. The stability and welfare of the whole community must be our plea to the people.



Mary B. McAndrew, superintendent of schools at Carbondale, Pa., one of the few women to head a large school system.

Ruch Explains Federal Aids to Occupational Guidance

Two distinct means for assisting guidance programs that are employed by the U. S. Office of Education in its new occupational information and guidance service were described by Giles M. Ruch, consultant for the service, in addressing the American Educational Research Association.

One involves the use of federal money available under the Smith-Hughes and George-Deen acts; the other is a direct service in which the Office of Education serves as a clearing house and research agency. To these ends the Occupational Information and Guidance Service of the Office of Education is preparing a number of publications to guide the several states with patterns for conducting local occupational surveys and to assist counselors and other guidance officers in public schools with the approved methods of helping youth to make satisfactory vocational and social adjustments.

States that wish to utilize funds granted under federal acts are required to submit a plan for a state supervisor of guidance to the Office of Education. If this plan is not contrary to the provisions of the law and established policies of the Office of Education, it is approved.

Our further aim should be federal support. It remains the only fair and just solution to augment the educational budget."

The Foundations of American Education Is Research Theme

Eleven crowded sessions featured the four day meeting of the American Educational Research Association built around the theme of "Research on the Foundations of American Education."

The meetings were devoted to the consideration of "Research in Arithmetic," "Child Development and the Curriculum," "Research in Child Growth," "Research in School Support," "Research in Secondary Education," "Research in the Curriculum," "Research in Pupil Personnel and Guidance," "Research in Supervision," "Research in English," "Research in Higher Education," "Research in Community and School Relationships," "Research in School Organization," "Fundamental Assumptions in Educational Measurement," "Pupil Transportation," "General Education," "Reading," "Elementary Education," "Factor Analysis," "Reorganization of Local School Units" and "Recent Developments in Statistical Inference."

Prof. William A. Brownell, Duke University, was succeeded as president by Bess Goodykoontz, assistant commissioner of education; Carter V. Good, University of Cincinnati, was elected vice president and Dr. William G. Carr, of the National Education Association, was reelected secretary-treasurer.

Definition of a Teacher by Wilmington School Head

Youth's leader, guide, collaborator and friend—that is the definition of a teacher given by Supt. S. M. Stouffer of Wilmington, Del., in a convention address.

Obviously it is impossible for the teacher to impart today specific information that will meet tomorrow's needs, Superintendent Stouffer holds. She can, however, teach the technics of problem solving and develop right attitudes toward life and democratic institutions.

One of the most important influences contributing to integration is the personality of the teacher. When she is calm and cheerful, the children tend to become likewise. A quiet voice, a pleasant smile, a sympathetic word, coolness in an emergency may contribute more real worth to a learning situation than a mountain of books and stacks of paper.

The teacher also influences integration through the technics that she employs in working with children.

Integrating experiences result when a child is faced with a real problem and feels the urge to solve it.

Says Progressives Have Become Conservative in General Education Views

The self-styled conservative president of Brown University, Henry M. Wriston, made a truly "liberal" approach to the subject of general education in his address before the National Society for the Study of Education.

This paradox may best be explained by comparison with the generally accepted "conservative" views of modern progressive educators. President Wriston proved himself a true "liberal," in that he held that the cycle of theory regarding learning has come "a full turn" and that educational trend has now returned to the original conception of the liberal arts college. Modern progressive educators, by the same token, are still behind the educational cycle which has reverted to the traditional forms of culture, and thus are "conservative" in their educational outlook.

Specific skills taught in today's schools are only useful in their appropriate settings, he believes. "Without the atmosphere which culture alone can supply, training is a mockery, whereas in the atmosphere of culture, experience will often develop skill much more rapidly than specific training can."

Dawson Defends Attitude of N.E.A. on Federal Control of Educational Subsidies

The N.E.A.'s stand on the subject of federal control of educational subsidies was defended by Dr. Howard A. Dawson, the association's rural service director, in a debate with Dr. Ward G. Reeder of Ohio State University before the American Educational Research Association.

Doctor Reeder contended that in granting federal aid for education the federal government should establish "certain standards, regulations or conditions which will be followed in granting the aid" and enumerated some of these standards. (See page 39.)

In opposing Doctor Reeder's view, Doctor Dawson argued that the control of public education is a state and not a federal function, as established in the tenth amendment, reserving the control of education to the states.

"It is understood that the only constitutional means the congress can employ in establishing these standards is to set them up as requirements which the states shall accept and agree to maintain as conditions precedent to the receipt of federal allotments," he said. "It is true that theoretically the standards and requirements would be matters for state enforcement. What happens, however, is that federal super-

vision and frequently the authority of federal officials to reject state plans result in federal domination and control not only of the specific standards, but of matters thought to be related in a vital way to these standards."

Doctor Dawson further contended that the results of "standards" being written into the law or left to be determined by federal agents make for (1) a high degree of federal dominance in affairs that had best be left to the states and their localities and (2) an inflexibility of educational program.

The Dawson recommendations for local efficiency and economy in the expenditure of federal grants are post audits, detailed statistical and analytical reports, pitiless publicity and the withdrawal of federal support to the states should rectification appear to be necessary until action is taken.

Alcatraz Warden Sees Danger in Neglect of Minor Defects

Warden James A. Johnston of Alcatraz Island expressed to a convention audience his belief that school failure accompanies delinquency, but that it also accompanies and is difficult to separate from other conditions that go hand in hand: mental defectiveness, poverty, broken homes, physical defects, psychopathic conditions and truancy.

"Many times I have read articles about the great number of persons in prison holding degrees from leading universities," he said, "but frankly I haven't met them, that is, not in great number."

Warden Johnston pointed to the tests made by Dr. Lewis M. Terman, professor of education, Stanford University, at San Quentin prison, as proof of the lack of mental capacity of prisoners.

"Judged by comparison with results of similar testing of individuals in various classes of society outside of prison, 17.4 per cent were classed as feeble-minded; 12.9 per cent, border zone; 25.2 per cent, dull normal; 38 per cent, average normal; 5.2 per cent, superior, and 1.3 per cent, very superior."

Warden Johnston would have every school child examined, not merely those who are obviously defective, for he believes that minor faults may be divulged which, if neglected, become fixed in habit and behavior.

County Unit Is "More Economical"

What West Virginia has accomplished in the way of economy and efficiency in public education since the adoption of the county unit system in 1933 was related by E. R. Vawter, superintendent of schools, Fayette County, West Virginia, before the department of rural education of the N.E.A.

Using his own county as an example, Mr. Vawter described how the advantages of the county unit system over the old school district system have resulted in greater efficiency in consolidation, transportation, increased average daily attendance and better plant and equipment maintenance, and how economies have resulted in increased curricular services, particularly in the vocational branches.

This is how it operates, according to Mr. Vawter:

"The supervisory staff is composed of one superintendent and four assistants, one of whom is a Negro who handles all phases of Negro schools. Each superintendent has supervisory

duties as well as a fair division of the other work.

"The transportation system is administered by an assistant superintendent and two mechanics. First aid training and a medical examination are required of each bus driver. He is provided uniforms. Both efficiency and economy are achieved from having a central garage rather than by having repairs done locally.

"The maintenance force is supervised by an assistant superintendent and directly by a supply man who dispatches maintenance crews and the plumbing crew and who distributes supplies. The board of education maintains carpenter, painting, plumbing and book repairing forces, and an electrician. Other economies are handling insurance on the three year plan, purchase of all books and supplies wholesale, discounting of all utility bills and prepaying of freight.

"Truancy has been handled by three persons instead of seven, resulting in greater efficiency."

The Successful Administrator

SIDNEY B. HALL

State Superintendent, Virginia

SOMEONE once said that administration is doing well things that should not have to be done at all. The truth or fallacy of that allegation lies in one's conception of the term "administration."

Administration grew out of instruction. In the earliest schools in this country there were no administrative employes, only pupils and teachers. In the town meetings the people selected their teachers, agreed upon their salaries, decided what subjects were to be taught, arranged for the repair of the school buildings and the purchase of supplies and settled all matters of policy.

As communities grew larger and school affairs more complex, it became convenient for the townspeople to delegate all school business to a school committee empowered to act for the citizens in the intervals between town meetings. Gradually these school committees were entrusted with all decisions concerning school affairs. As a measure of convenience, one member of the committee was often appointed to carry out the will of the group. As school business grew more complicated and it became evident that a schoolman could represent the board more efficiently than a layman, the position of a paid superintendent of schools began to evolve. It happened that, from 1835 to 1880, the superintendent was primarily the business agent of the school board.

Large Boards Unwieldy

As small towns and districts amalgamated into cities, the joining of their separate school boards produced large unwieldy city school boards which the superintendent had to consult, both on matters of policy and of finance. The superintendent had difficulty in obtaining action when the representative of each district was concerned solely with the advancement of the interests of his own district and not of the others.

Moreover, beginning in the '80's, school enrollment began increasing steadily. High school enrollment, as a matter of fact, has doubled every decade since 1880.

The rapid increase in school enrollment created a demand for teachers greatly in excess of the supply of well-trained ones available. The low salaries paid teachers offered them little inducement either to enter the profession or to improve their training once they had entered the field. Consequently, the majority of teachers had little professional training for their work. As a result, teachers were interested in their subjects, not in their pupils. Their methods were acquired through trial and error. To reduce the inefficiency of the teaching personnel, additional administrative officials were employed to see that teachers achieved at least certain minimum requirements. Thus began the appointment of supervisors and principals.

Administration in the high school was delegated to the principal, who ran the school as he chose within the limits set by the superintendent and the school board. All rules and discipline emanated from his office. Within his building he was the law.

About 1880, municipal reformers, dissatisfied with the inefficient management of school affairs, wherein politics commonly played an important rôle, turned to industry for a model for the reorganization of school administration. In business, they admired the practice of having a small board that appointed a manager solely on the basis of his ability and left him free to work as he chose as long as he produced results.

School administration needed a thorough overhauling, but whether business was the best model to follow is open to question. The schools took over the business criterion of efficiency and tried to apply it indiscriminately to education. Intelligence tests and scientific measuring instru-

ments were developed. Forms and standards of achievement were developed, based upon the practice of industry.

All of this contributed to a sort of mass production idea of education. Education was conceived of as a body of facts to be gained from books. The attempt to require all children to learn the same data in a specified amount of time in factory style often led to autocratic methods of supervision and administration and a disregard of the abilities, interests and personalities of the individual children for whose benefit the schools were presumably operated. Thus, overemphasis on efficiency led to regimentation and autocracy, and administration forgot that it was the servant of instruction.

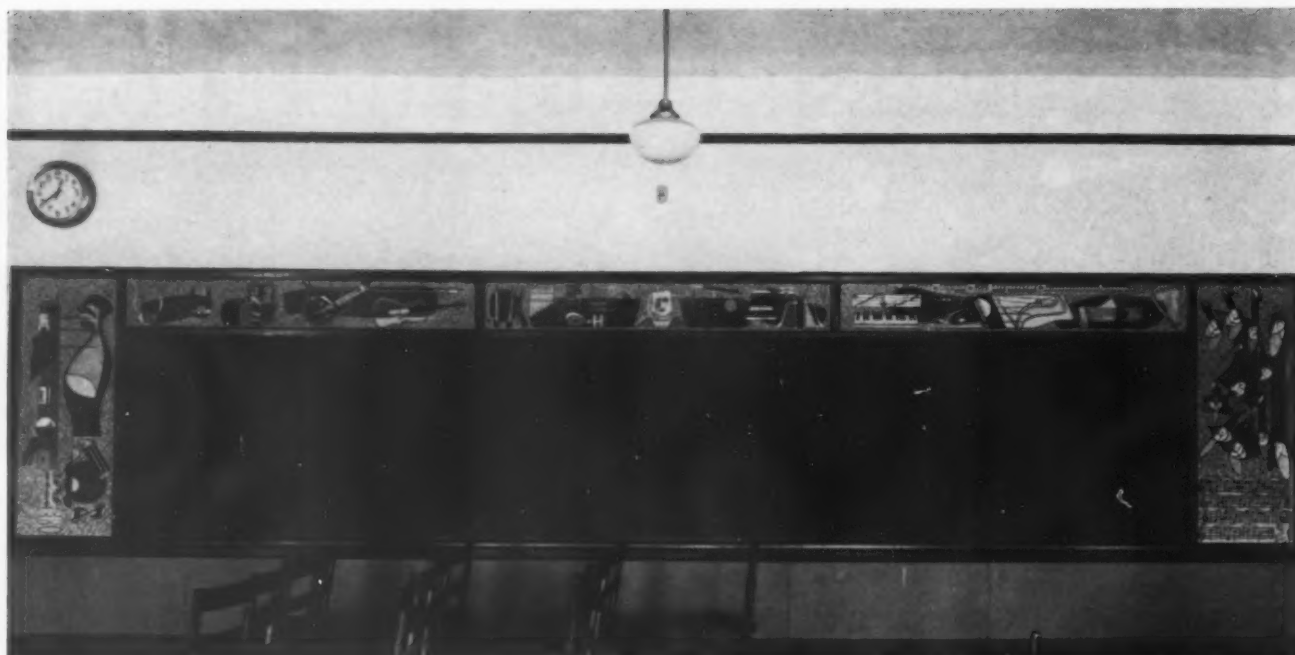
Tactics Crush Initiative

This militaristic organization was in actual fact neither economical nor efficient, for it so crushed both teacher and pupil initiative that it led to a mechanical performance of meaningless routines. But so long as the teaching personnel was largely untrained, it did obtain minimum levels of attainment in different classrooms.

The schools of today present a vastly different administrative problem from that of the schools at the turn of the century. The huge increase in enrollment, particularly in the high school, has resulted in a student body so heterogeneous that the high school curriculum has been greatly expanded, and social conditions have led the modern school to assume a number of responsibilities in addition to those accepted by the school of 1900.

The modern school undertakes to provide educational opportunities suited to the individual needs of all the children. More and more, the school is assuming responsibility for the social as well as the intellectual education of the pupil.

Modern school administration has grown to be a complex and chal-



Karl Knath's color composition for mural at the Falmouth High School, Falmouth, Mass., allocated to that school by the Works Progress Administration.

lenging job, as the society in which it operates has become complex, but school administration today, as yesterday, justifies itself only in terms of an excellent instructional program and only to the extent that it provides for the individual child the opportunity to develop to the utmost of his capacity his potentialities and the opportunity to grow mentally, morally, physically and spiritually. It is the business of administration to provide the kind of environment most conducive to maximum pupil and teacher growth, for it is not likely that pupil growth will take place where there is teacher stagnation.

If this is true, then it is high time for administration to bring its practice into harmony with its philosophy. Administrators preach the doctrine of shared pupil activity programs. They recognize that participation brings growth, interest and happiness to pupils. The same principle applies to teachers.

When teachers participate in the formulation of plans, in decisions as to matter of policy and in curriculum making; when they have freedom to experiment and to apply their own ideas; when they understand the problems to be met and subscribe to the method of meeting them; when the relationships between teachers and administrator are such that teachers feel free to make suggestions or objections or to seek ad-

vice, then the administrator is doing his part to create an atmosphere that will lend itself to maximum teacher and pupil development.

There is a fundamental inconsistency in the attitude of administrators, whose primary concern should be the achievement of an excellent instructional program, who entrust children to teachers for whose ability they have so little respect that they hem them in with restrictions and prepared outlines of what is to be taught. Thus, they guarantee that neither pupil nor teacher growth can take place. Before we can achieve democracy in the classroom, we must have democracy in administration.

In these times when democracy is fighting desperately for survival, education in America has a tremendous opportunity and responsibility to shape the future course of civilization. Our children must be led to evaluate the social forces that are playing upon society and, through practice in critical evaluations of contemporary problems, be prepared to make intelligent decisions concerning future problems as they arise. Fortunately, in some of our most progressive schools both pupils and teachers are being given the opportunity to share in administrative responsibilities. Thus they themselves are growing by participation in ad-

ministration, and administration is being challenged to achieve higher levels of creative leadership in its effort to improve the instructional program.

What, then, seems to be the responsibility of administration for instruction today? It is no longer to prescribe what is to be taught, nor how, nor when, but to provide the environment most conducive to maximum pupil growth and to work cooperatively with pupils, teachers and community to provide a broad and flexible instructional program adapted to the present and future needs of all of the children in the community that the school serves.

To do this, administration must be constantly on guard to prevent the erection of administrative hurdles that might in any way impede the realization of this aim. The child, rather than administration, is the major concern of the school today, and administration is retiring to its proper place as the servant of instruction. In conclusion, may I summarize the point of view that I have been endeavoring to develop:

Administration finds its justification primarily in terms of an effective instructional program, which results in producing individuals who have personal integrity, usefulness, social insight and purpose.

Education Produces Wealth

L. JOHN NUTTALL

Superintendent, Salt Lake City

WEALTH is produced by the labor of individuals or of groups. A share of all current production must be retained as capital goods to be used for further production. Another share of produced goods and values goes to the masses of people as wages or interest or taxes for relief, to be used for the purchase of food, clothing, shelter, recreation, health care and other personal services. It is in this field that the direct satisfactions of the use of wealth lie. Here, also, are determined the extent and nature of productive activity because markets are created by the consumers of goods.

A third share of wealth goes into special cooperative services rendered by government and supported by taxation. Because of its historical importance to the general welfare, education has been classified in this group of services.

How Much for Education?

Just how much and what part of produced wealth should be used to support the process of education? If education increases the production of wealth, it should be supported from that part of wealth classified as production goods. If it adds directly to human happiness and satisfies the desires of people in their quest for comfort and joy, then education is entitled to part of the wealth classified as consumers' goods. If both results should come from education, then a system of support for education that takes proportionately from productive capital and from the masses of people would seem proper.

Education assists in the production of wealth in two major ways. It creates in the masses of people demands for the products of industrial activities, thus creating markets. Financial and industrial movements are part of a cultural pattern. There can be no doubt that the gradual extension of universal education has contributed to the understanding and maintenance of the

level of living now characteristic of this country. A reduction in tastes or a shift in customs, which might result from a considerable limitation of educational opportunities, could upset seriously the present industrial program.

Those industrial and business activities for which democratic educational institutions build a market prosper because the general welfare maintained through education builds a demand for their products. No one would claim that formal education is the only causative agent in the upbuilding and maintenance of the present standard of living in America. It is, however, a most important factor, worthy of appreciation and support.

Education makes possible more efficient production of wealth because of its effect on labor. Out of the widespread study of science in schools and out of the general encouragement given capable pupils in connection with school work have come most of those younger persons who have contributed to the inventions now serving industry. A school system restricted to the wealthy or to the few who will rise above adversity will naturally produce fewer leaders than a school system in which every young person is filled with a desire to achieve the highest possible degree of efficiency. More persons under the latter conditions will rise to the level of original thinking and creative genius.

A proper program of training, if complete and free, would distribute workers among types of employment on the basis of ability. Remuneration also could be differentiated on this basis of efficiency and not determined by artificial scarcity in any occupation. In this way the general economic level would be raised by education.

But education does more than

create markets and furnish certain training for skills. Every industrial system works in a given culture controlled by governmental processes. The welfare and effectiveness of industrial organization depend upon a certain stability in the social and political system in which it operates. Whenever the common welfare demands basic social and governmental changes, these should be made gradually and by due process of law. Action based on the will of the majority with minorities fully protected in their property and personal rights is still the democratic way. Stability of business demands regular, quiet and deliberate methods of social change. To such a process all parts of the social order can and must adjust. The people must understand this process of government.

The development of thoughtful civic attitudes is the work of public education. This was the purpose conceived for public schools by the founders of the republic. The welfare of industrial production is as dependent on this work of the schools as are the safety and perpetuity of any other institution in American life.

An Educational Contribution

There is one other important way in which public education contributes to the production of wealth. Present day production is highly mechanized. The artistic feature of the product and the scientific processes of manufacture are both largely incorporated in the machine itself. An interested worker understands the product he is making. Likewise, the worker is more efficient if he feels that he is an intelligent factor in the process. Back of such a feeling is a comprehension of what takes place when he operates the machine and the actual value to human life contributed by his activity.

Public education makes a contribution to a "higher level of culture," the value of which cannot

be easily calculated. An economic system must look with favor on the educational system that assists materially in building the attitudes that determine the political will. A public opinion that fosters industrial development is the product of a school system that teaches freely the principles of economic life.

The power of consumption is limited. A sufficiency is all that can be enjoyed. The total enjoyment depends upon the variety of wants that are satisfied. Education is itself one of the real human satisfactions. It brings pleasure in its own right, along with food, clothing and shelter. As more education is furnished the people, more good is done and greater fundamental joy is created. Wealth or finances that are used to provide the satisfactions of education pay largely for personal services. The money so used supports those who render the service. It is thus used as purchasing power. The market for the products of industry is not reduced by educational support but is increased by added series of transactions.

Depend Upon Understanding

Security and loyalty depend in the individual mind upon an understanding of the movements and trends in governmental control. Citizens want to be constructive in their vote. They strive to see clearly what is happening and to act wisely in projecting possible consequences. They do not want to be the victims of propaganda or unscrupulous misuse of communication devices. They want to know about and see the significance of public activities and political leadership.

Conservation of health is perhaps man's most basic want. Part of this comes from the services of physicians and other experts paid for from wealth set aside for consumers to use in the satisfaction of wants. In other ways health is maintained by the knowledge, habits and thinking of the individual himself. These come from education. In all of these ways and in many others education directly satisfies the wants of men. It has immediate service value.

With a program of schooling provided for all of the people, with the values just outlined, there come, as

generalizing effects, tolerance, feelings of national and local unity, a sense of comradeship among people and a desire to live and work together. The denial of education so that the wealth it costs may be diverted to further satisfaction of other wants may be a doubtful procedure. This becomes particularly true if education is denied to only a part of the population and the excess of consumers' goods goes to the people who also have education.

Wealth is power when used for the production of further wealth. In the consumers' class wealth is the agent of better living for all. A relatively large share of the wealth now used for consumers' purposes can profitably go to education, for in education is found the means to tolerant living, as well as the direct satisfaction of human needs. After the necessary capital goods are taken from currently produced wealth, from it is taken enough to support an education which, in turn, increases production. For building joy in living, a share of the remaining consumers' goods, distributed as equitably as possible into wages and interest, is available in satisfying other educational wants.

What often appears to be a contest between wealth and education is most often found to be an expression by producers and managers of economic production against reducing capital so that it may support education.

Undoubtedly the costs of education are to be assessed partly through a tax system based on ownership of productive property and partly through personal income and excise taxes. One part of the support is in this way as fixed and certain as the capital structure of our industrial system. The other part of the support, coming as a share and share alike system in utilizing what is available for the comfort and enjoyment of the people, may vary with economic prosperity and the general level of spending power.

Another phase of this apparent contest between wealth and education is found in the critical attitude of business men toward the actual cost of the program which they really agree should go forward. Frequently, during recent years, the de-

mand has been made that school administrators retrench as far as possible without reducing educational efficiency. There is a point here that is worthy of consideration.

Nowhere have necessary costs of education been determined. There are campaigns for higher salaries. When will salaries be high enough? What basic income is necessary to make teachers constantly constructive public servants in a democracy? What elastic elements are necessary in a salary plan to ensure salary increases if financial conditions are inflationary? Also, will they receive sufficient incomes if business recessions come, and will they share in retrenchment instead of becoming victims of political and economic manipulations?

How Much Is Enough?

There are demands for better buildings. When are buildings elaborate enough? School folk plead for more instructional materials. When is a teacher well supplied? The materials used in education and the school plant bear a direct relationship to the efficiency of education. The quantity of supplies and the size of buildings must be adapted to the number of children being educated. These items depreciate both from use and from obsolescence. The managers and directors of schools may well be asked to study and to make clear the processes that require either extension or replacements of school plants and instructional equipment and supplies.

Business bargains for a fair cost for education. Leaders in business should know what support is needed to make sure that the basic values of education will be attained. How much wealth is necessary in the capital goods class to assure that the contribution of education to the process of general economic production will take place? They, in turn, are justified in asking for a definition of the share of consumers' goods that should go to universal free education. Industrial, political and educational leaders need to work together in devising a plan for distributing the social income between educational support, capital goods and the general standards of living in America.

Curriculum and Child

CARLETON WASHBURNE

Superintendent, Winnetka, Ill.

PART 1 of the thirty-eighth yearbook of the National Society for the Study of Education is the first book of any kind to deal with the relationship of the curriculum to child development. Exhaustive as has been the effort of the writers to discover all published and many unpublished studies, the yearbook seldom is able to answer definitively the question that it poses. Research in the field that the yearbook opens for exploration has been distressingly meager and inadequate. A great many studies are referred to, but most of them, on examination, proved to be only around the edges of the field or, at best, single lines that penetrate into the field but cover little area. Certainly the yearbook raises far more questions than it answers.

Part 1 consists of two chapters. The first is an introduction by the chairman of the committee, explaining the purpose and point of view of the book.

A Threefold Process

The child's development, it is explained, is a continuous process. A given level of development may be simply an artificially blocked off segment of this continuous process or it may represent in certain cases a definite stage, just as the opening of a flower represents a definite stage in the continuous growth of the plant. Development is described as being partly biologic, in terms of actual growth and physiologic maturing; partly mental, in terms of the interaction between the maturing mind and its environment, and partly experiential, in terms of the actual experiences with which the developing organism comes into contact.

The second chapter is a full summary of what is now known about child development. In it John E. Anderson brings together in a comprehensive survey the outstanding facts of child development as re-

vealed by innumerable studies. In this chapter no attempt is made to relate the curriculum to child development.

Part 2 begins with a preface. This explains why subject matter divisions have been used rather than divisions representing development levels with the various phases of subject matter integrated according to levels. It is pointed out that the research which is available is of the former nature and that, however desirable a different organization might be, the data at hand preclude its use in the present yearbook.

Then follows a series of chapters on the research data available regarding various aspects of the curriculum in relation to child development, four by Arthur Jersild and associates on motor activities, routine habits, radio and motion pictures, graphic and allied arts; one by Ruth Strang on health and safety education; two by Fowler Brooks and associates on practical arts and foreign language; one each on reading, writing and spelling by the three veteran contributors on these subjects, Gray, Freeman and Horn; one on spoken language by John E. Anderson and one on written language by Leo Brueckner (Brueckner also contributes one chapter on arithmetic, Carleton Washburne contributing the other on the work of the Committee of Seven); one on the social sciences by

Kai Jensen, and one on emotional and social adjustment by Harold Jones.

Part 2 concludes with a note on the possible integration and interrelation of these various subjects and again emphasizes the fact that the yearbook committee in its treatment of subjects independently in no way implies a belief that in practical teaching procedures such subject matter divisions should be adhered to.

Part 3 consists of a chapter by John E. Anderson that discusses the research technics and methods necessary for any adequate exploration of the field of child development and the curriculum. The difficulties in the way of such research are clearly pointed out and the general lines that research must take if the curriculum is to be related to child development are discussed.

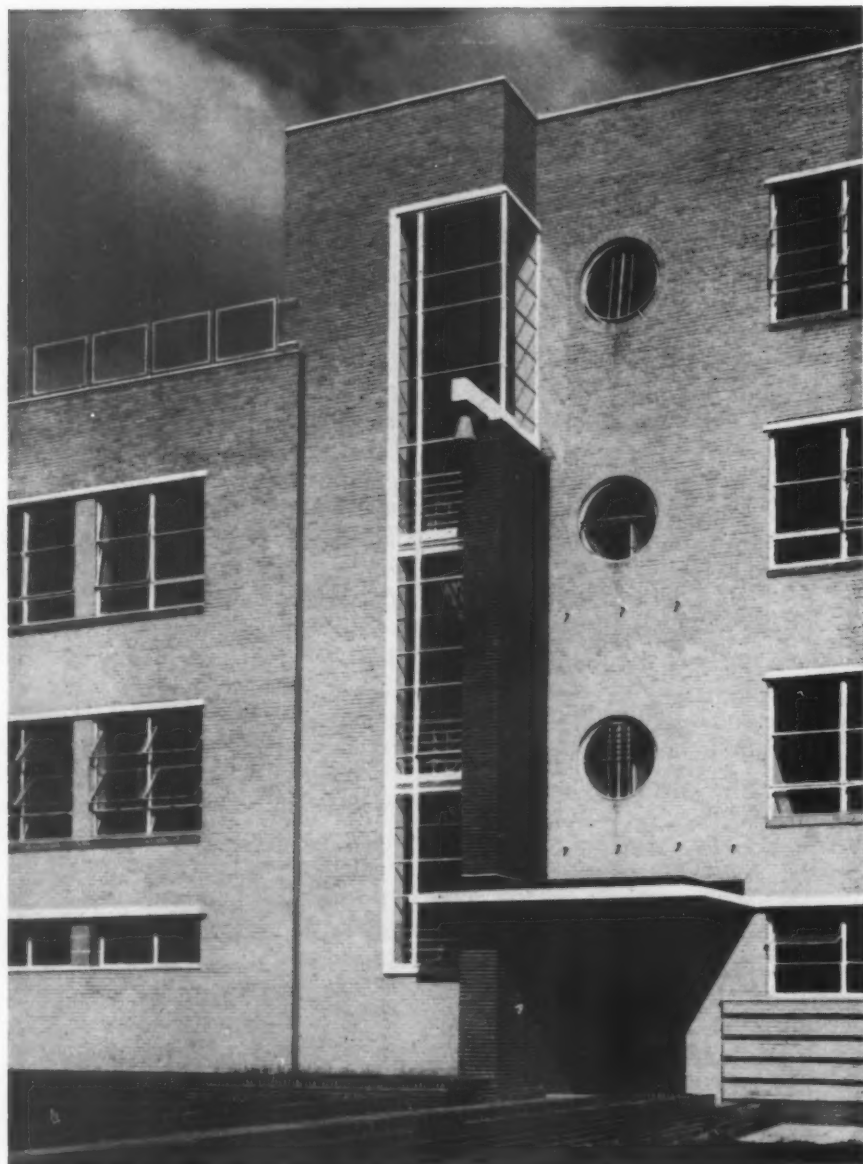
Questions for Research

This chapter on technics is followed by one by Kai Jensen in which the research problems that have been raised throughout the yearbook are brought together in the form of a list of questions.

The final chapter is a short evaluation by Ernest O. Melby. After paying due respect to the scholarly labors of the committee he points out that the yearbook is not and, perhaps in the present stage of investigation, could not be a practical handbook for the classroom teacher.

The yearbook committee consists of John E. Anderson, Fowler Brooks, Leo J. Brueckner, Kai Jensen, Arthur T. Jersild, Harold E. Jones, Ralph W. Tyler and Carleton Washburne, chairman. Associated with the committee are the following contributors: C. O. Arndt, Herbert S. Conrad, Frances M. Dwyer, Paul J. Fay, Frank N. Freeman, William S. Gray, Ernest Horn, Paul McKee, Norman C. Meier, Ernest O. Melby, Lois Barclay Murphy, Etta Schneider, Ruth Strang.

A brief description of the content of the thirty-eighth yearbook of the National Society for the Study of Education by the chairman of the yearbook committee



The pupils' entrance to the Burlington School for Girls, Hammersmith, England, showing, among other details, the continuous window to the pupils' staircase; classroom windows; wire mesh panel balustrade to roof terrace; school bell on cantilevered beam and the supporting brick pier.

IN ENGLAND, as in every country today, new ideas in education are producing new conceptions of school design. As the purely human factor plays a vital part in school planning, it is in schools that the modern movement in architecture frequently finds its most characteristic expression. On the European continent a number of schools showing startlingly fresh departures in free planning and esthetic treatment have appeared during the last decade. Dudok in Holland, Lurçat in Paris and Schuster in Vienna are only a few of the outstanding names.

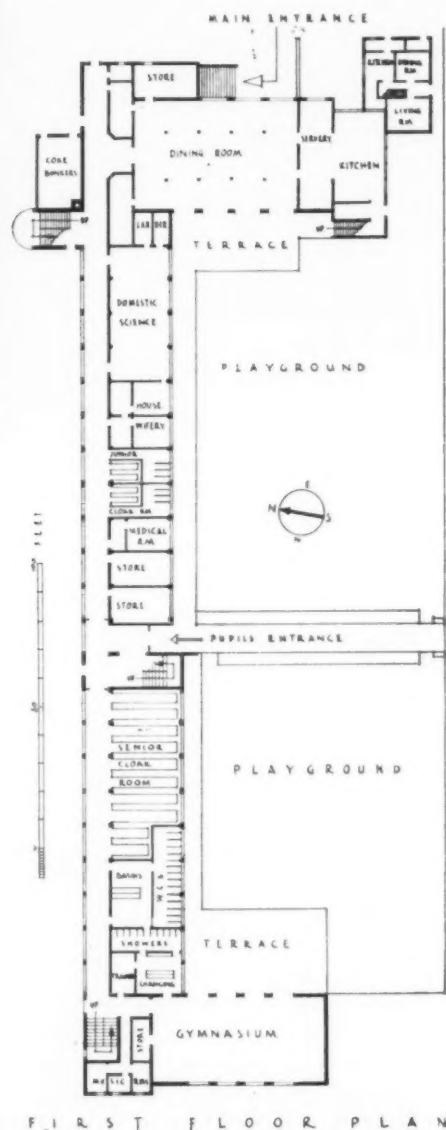
If by comparison England appears

to lag in this respect it is not because of any dearth of designers, but because of the dominating influence of tradition throughout English education, especially in those large historic establishments peculiar to the country, known most inappropriately as the "public schools." A strong underlying bias toward the scholastic and the classical and the existence of school buildings contemporary with the original foundations of some of the oldest schools, such as Eton and Winchester, have tended to perpetuate neo-Gothic clichés rather than to encourage new building forms. The design of state schools, on the

Design in

other hand, is usually left to the architectural departments of local authorities working under a borough engineer. The results often show laudable competence but little imagination, the Middlesex County Council being a notable exception. The Cambridgeshire authorities have also initiated a farsighted and comprehensive scheme of child and adult education among the rural villages of that agricultural county.

Climatic conditions in England do not favor the extensive use of the open air school that has been devel-



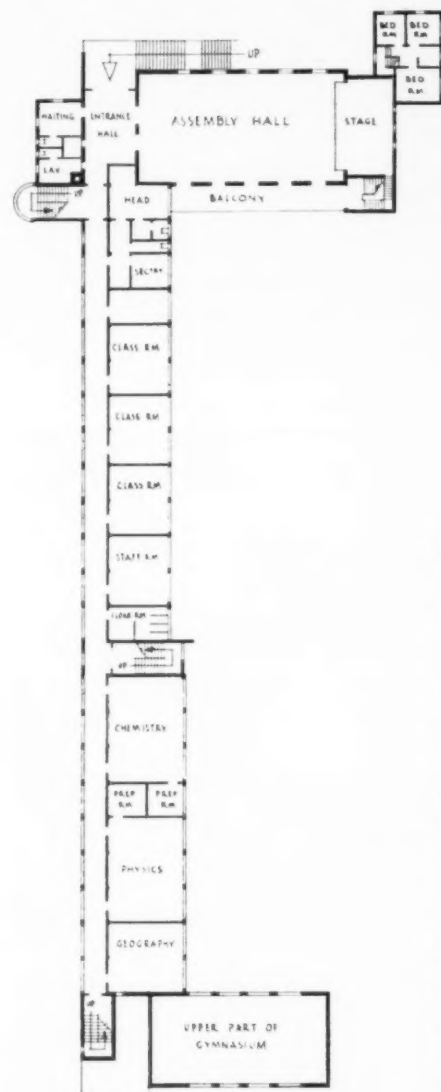
England

ROGER TOMALIN

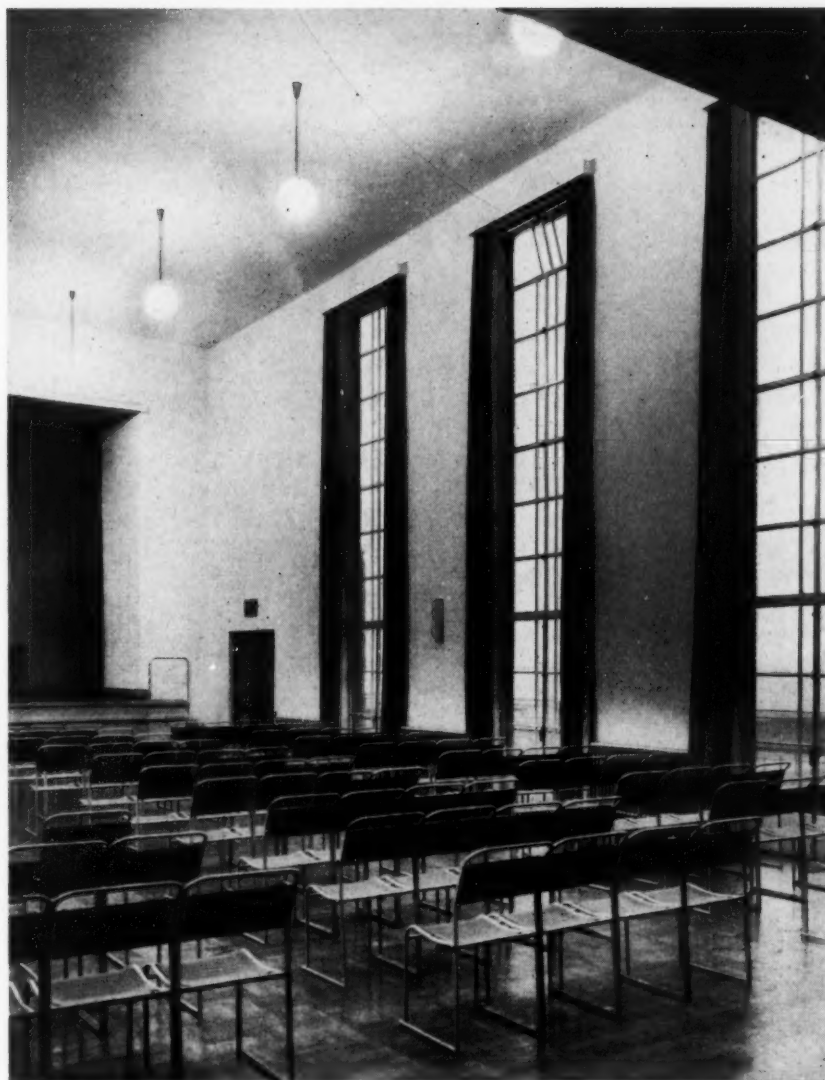
Architect

oped in consistently warm and sunny places. The modern trend is set strongly against the idea of the school as a formal civic institution. It rejects the traditional quadrangle plan and favors, where the site allows, an extended plan giving proper aspect to all classrooms and avoiding all pockets and enclosed courts. This, reacting on the esthetic treatment of the building, produces a human and informal character in place of the rigid symmetry of the older type.

The Burlington School for Girls at Hammersmith typifies most of the



SECOND FLOOR PLAN



The assembly has a 22 foot stage and gallery. Long windows stretch from the ceiling to the floor and open on the west side onto a balcony overlooking the playground. Pictures by courtesy of "Architecture Illustrated."

tendencies in modern English school design. It was completed in September 1936 to the plans of Sir John Burnet, Tait and Lorne, a London firm of architects. Although assisted by public funds, the school is a private one. Originally endowed in the eighteenth century as a charitable institution, it is now controlled by an independent and liberal minded governing body. The maximum capacity of the building as existing at present is 500, consisting of day pupils of both elementary and secondary school age, 8 to 15 years, with further provision for a limited kindergarten enrollment. The children are drawn from middle class homes in the neighborhood, which is part of the vast sea of uncontrolled speculative estate development that sprang

up in the outer environs of London after the war.

In this welter of architectural pettiness the Burlington School provides welcome relief. In character it shows evident signs of the inspiration of recent Dutch work, particularly that of Wilhelm Dudok, whose brick built schools at Hilversum have become classic examples of informal charm and geniality.

The structure of the building is a simple steel frame with bays at 12 foot centers clothed in brick. Panel walls between stanchions are in cavity brickwork. The bricks were imported from Holland and are a light yellowish brown; horizontal joints are raked, and as much effect as possible has been obtained through simple methods of brick treatment

with a judicious admixture at special points of colored faience Dutch tiles. The metal windows, painted light cream, stand out cheerfully from the brickwork; flower beds raised a foot above ground level and enclosed in dwarf brick walls form delightful decorative features in the layout around the building. The general effect is neither pompously institutional nor starkly utilitarian.

The site, although surrounded on three sides by public open spaces, was sufficiently restricted to make four stories necessary, two being the desirable maximum. This allows comfortably for two asphalted playgrounds to the south of the classroom block, thus shielded from the coldest winds. The playing fields are on a separate site within short walking distance.

The plan itself is a model of simplicity and directness. All circulation proceeds along one straight corridor, 8 feet wide, from which all rooms are entered. Assembly hall and gymnasium project at each extremity, their vertical emphasis contrasting with the horizontal treatment of the classroom block. The assembly hall was planned thus to shield class and staff rooms from the main road adjacent to the site on the east. The more usual practice in this type of plan is to make it separate the two. The principal entrance is next to the

road but the children enter along an approach road and paved path between attractive flower beds leading to an entrance in the center of the elongated classroom block. An excellent bit of detail has been contrived here by a cantilevered support for the school bell.

All children's cloakroom and lavatory accommodations are on the first floor and the disadvantages of awkwardly projecting lavatory blocks are avoided. The domestic science room (with a miniature flat adjoining it), which had to be in close communication with the main dining room and kitchen, is the only instruction room on this floor. The second thus becomes the entrance floor and is approached by an external flight of steps leading to a small foyer in front of the assembly hall. Most of the cloakroom and lavatory space is between the children's entrance and the gymnasium, with a section for small children on the other side. The cloakrooms are shut off by an open wire mesh partition from the corridor, the gates being locked during the day. Wire mesh shoe lockers are screwed to the underside of the seats. The whole seat tips up to facilitate cleaning the floor. The temperature of the water for shower baths is controlled by a regulator. Floors throughout this part of the building are finished in granolithic.

The extended plan gives all classrooms a S.S.E. aspect and most of them occupy two structural bays. Windows stretch the full width between stanchions; they have inward opening hoppers immediately over the sills. The two upper sections are center-pivoted and counterbalanced and may be opened by hand. The pivoted sections are checked at the horizontal and the whole glass area above the hoppers can be opened to the fullest extent. The sills, finished in black tiles, are 4 feet from the floor, cutting off the view below eye level when children are sitting; but many advocate a maximum glass area, for the sake of psychological effect no less than of lightness. Questions of heating cost usually intervene to limit this, however.

One of the most striking features of this school is the way in which color and internal surface finish have been studied. No discordant note disturbs at any point the pervading blue and buff color scheme. The main corridor has a buff dado finished with an enamel spraying process on a rough cement ground, giving a well-textured, easily cleaned surface. Doors to classrooms are flush, ply-faced, with a glass panel, and are painted a delicate sky blue. Floors in corridors and classrooms are covered with light green linoleum; the dado to classrooms is of a

Doors at the rear of the dining room are typical of internal communication doors and partitions generally. Double doors provide easy access to the veranda.





The library in the Burlington School is planned with projecting bookcases forming quiet reading bays; the walls are paneled to the ceiling and all the woodwork is in untreated Australian walnut with gold painted V-joints.

rougher linoleum with a black metal strip covering the joint with the plaster. Walls generally are finished in lime plaster, ivory distempered, but the laboratories have fair face brick walls, painted.

The simple plan has led to the elimination of dusty corners and pockets and cleaning costs in this school are relatively low. Blackboards and painted flush cupboard doors have been carefully arranged to give unified interiors to the classrooms. The light blue door opens in some instances with striking effect against a bright orange cupboard. The furniture, which is movable throughout, also blends with the general scheme. Wooden desks are finished in black cellulose paint and are supported on yellow tubular frames; the chairs are similarly treated with seats and backs formed from a single piece of bent ply; they can be stacked in a minimum space.

The circulation space is kept free of as much solid interruption as possible. A feature of the pupils' stair-

case is the continuous window running from ground to top floors, the edges of the landings being set back 6 inches from the glass. Balustrades to stairs are open and of metal, with polished nickel-plated handrails and painted supports. All internal doors, dividing lobbies and corridor with their flanking partitions, are completely glazed in wired glass set in painted metal frames. External doors are similar in treatment.

The assembly hall has a 20 foot stage and a gallery; seating is unfixed and the chairs are of tubular steel and are easily stackable. Long windows stretch from ceiling to floor and, on the west side, open onto a balcony overlooking the playground. Beneath it the dining room opens with double doors onto a covered veranda where the midday meal may be served in the summer. The gymnasium also has double doors opening onto a drill terrace.

The library is planned with projecting bookcases forming quiet reading bays; the walls are paneled to

the ceiling and all woodwork in this room is in untreated Australian walnut, with gold painted V-joints. Over the laboratories a roof garden with a small conservatory, attractively paved with special insulation tiles, provides an open air resting place accessible to the top floor classrooms. There is a caretaker's cottage adjoining the main kitchen.

Heating is by low pressure hot water with gravity fed automatic thermostatically controlled coke-fired boilers.

The school cost, at a time when building prices were relatively low, approximately £45,000 exclusive of furniture and movable equipment.

The Burlington School is fairly exceptional at the moment. That there are, however, designers in England capable and desirous of producing schools as advanced in conception as the best Continental examples, was emphatically proved recently by the huge entry for a Modern Schools' Competition promoted by a London newspaper. The winning designers tended to follow French and Austrian precedent; reinforced concrete was the most popular medium.

Chalk Dust

FOUR questions will I ask myself each morning before I presume to pass upon the problems that have bewildered many a man greater than I:

Can I recognize a china egg?

Why is a waste basket?

Can I use both ends of a pencil?

Can I take the rubber from my backbone to make a chin protector?

• •

Conventional Reflections

Wisdom and culture, gab erudite;
Panels, chock full of contention;
Thousands of papers, heavy and light,
Born at the Cleveland convention.

Essays with merit, papers of bunk
Crooned in a scholarly way;
Sparkling nuggets, buried in junk,
Speakers with nothing to say.

College professors, bowed with degrees
Principal, bookman and dean,
Phi Beta Kappas, lean Ph.D.'s
Schoolmasters sandwiched between.

Movies and mop pails, floor wax and rings,
Sweepers, diplomas and globes.
Thousands of samples of thousands of things
Catalogs, radios, robes.

Shiny new school desks, polished and trim,
Streamlined to fit girls and boys
Banquets and fellowship, vigor and vim,
Public relations and noise.

Home again! Smoky, sleepy and wise,
Filled to the fullest extent.
Eyes that have seen Pedagogue's Paradise;
Money, gosh darn it, all spent!

• •

BE A picker-upper, O Ichabod, and not a layer-downer. While the layer-downer leaves his desk messy with unfinished tasks and the trivialia of a tedious and tasteless day, the picker-upper loses no dignity by picking up the papers that litter the school lawn or the trash that clutters his curriculum. Pick ye up, therefore, that frightened little candidate as she faces the ordeal that may make or mar her future contribution to society; pick up that defiant youngster who has been battered by a cock-

eyed world or the parent who comes in all humility to confess failure and inadequacy. For what point education if it lies not in the picking up of mankind?

• •

WHAT have I done today? Gossiped with a book man, frittered away an hour trying to pacify an irate parent, wasted time exhorting a few misunderstanding kids, argued with a board member about some ancient sanitary facilities, bawled out a janitor, got eyestrain over a balky budget, checked plans for a school building program that will be smashed by the taxpayers' league.

More than that? Yes, Mister, it may be that you have learned a little bit about the newer books that are helping to remodel education or that you have brought a tiny bit of courage and hope to a well-nigh broken-hearted mother. You have, perhaps, pointed some youngster toward a career that will carry him to happiness.

Today, you made the world a safer and more healthful place in which to live. Today, you solved the world's most pressing economic problem of how to make a dollar buy an honest dollar's worth of value. Today, you carried forward a generation of boys and girls who will live abundantly after you are dust.

Is it possible that in the heat and burden of the day you have mislaid your sense of values? Have you forgotten that the reward of your work comes not in the piling up of devalued ducats but in unique and golden opportunities of service to man?

• •

WHEN the convention orators have told us in their inimitable way what is wrong with American education, when the writers for educational periodicals have enunciated their newest methodology, then let us listen to the still small voice of the classroom teacher:

"What we need is more leadership. What we want is more supervision. What we hope for is more understanding."

Simple words, nothing startling, nothing new. But therein lies a challenge to every educational leader in the land.



Speaking for American Youth

EDMUND E. DAY

President, Cornell University

BOLD, indeed, would be the man who undertook to speak authoritatively these days for American youth; and for a man past 50 to speak at all for American youth may appear to be plainly presumptuous. Nevertheless, that is what I propose to do.

It has to be admitted at the outset that, with reason, youth might have a sharply critical attitude toward the legacy of our times. From the perspective of the late 1930's, there is a bitter, almost ridiculous irony about the idea that the Great War was fought "to end all wars" or "to make the world safe for democracy." Youth knows that whoever claims to have won that war, civilization certainly lost it. The current deterioration of international morality and the constant threat of further wars are both appallingly evident. Within our own country the national economy after several years of treatment remains sadly confused. A mounting public debt poses to youth the problem of later repayment. The burden of caring for the unemployed, the destitute, the sick, the aged and infirm, not to mention the veterans of foreign wars, assumes larger and larger proportions. Meanwhile, the natural resources upon which the national economy is based are not what they used to be with free land gone, forest land largely denuded, millions of tons of top soil washed to the sea and mineral deposits substantially reduced.

Not Critical of Predecessors

No, youth would be within its rights if it commented rather caustically upon the job that has been done by its predecessors. Upon the whole, the attitude which youth has taken with regard to these matters is extraordinarily free of resentment. Happily, youth concentrates its attention on the future, not on the past.

My reporting of the views of American youth will be confined to

four matters: the schools, employment, democracy and world peace. These are large subjects and all I can hope to do is to give in barest outline some of the views which I believe American youth to be entertaining.

The attitude of youth toward the schools has been profoundly affected by the fact that the secondary school as well as the elementary has become well nigh inescapable. Time was when those who did not like formal education could avoid it after a limited sentence in the elementary grades; there was always some kind of a job to which to escape. That time seems to have passed with little if any prospect of its return. It now looks as if, up to age 18, or possibly 19 or 20, young people in America will be compelled to go to some kind of school. The high school can no longer be thought of as a school for the more academically disposed minority of young Americans; it has become a school for all young Americans of whatever disposition.

The attitude of youth toward the schools is widely variant, of course, and reflects a great diversity of youthful interests, attitudes and aspirations. It is safe to say, however, that by the time they are well along in their teens the great bulk of our young people wish to have school programs exhibit clear and fairly direct bearing upon the life interests of the learners. What are some of the primary rôles these young people expect shortly to be playing? Obviously they wish to become workers or producers; the great bulk of them wish to become home and family builders; less uniformly and less fervently, they wish to be effective citizens. Here are approaching responsibilities for which they would like to prepare. They are not inclined to accept the doctrine that no specific preparation is in order, that the only suitable course of training is indirect and is solely concerned

with the cultivation of intellectual and moral virtues.

No thoughtful person is going to question the importance of these intellectual and moral virtues. No one is suggesting that society try to dispense with these virtues. On the contrary, everyone wants a more ample supply of them and the only serious question is how to get it.

One answer is to return to the traditional academic disciplines; the other is to reorganize the curriculum with specific reference to the evolving life interests of the learners. It is reasonably clear that youth leans to the latter view of the matter. This is thought to indicate a softening of the intellectual and moral fiber of youth. Frankly this is not a fair interpretation. We much realize that the secondary school is dealing with a new kind of school population, and that young Americans of secondary school age are facing a new kind of world. It would be surprising, indeed, if under these circumstances, no change of school program were in order.

Expects Vocational Changes

Youth, then, is somewhat critical of the American school of today and is looking, rather confidently, for changes for the better. Without seeking any softening of the school program, youth expects the American school of the future to cope more successfully with vocational training and adjustment, with preparation for home and family life and with training for effective citizenship in a truly democratic America.

One further idea about education gains wider and wider circulation among our young people. It is held that individuals of exceptional promise should not be kept from realizing their promise through lack of financial means. In the opinion of youth, there is inexcusable social, as well as individual, wastage in our failure to provide means by which gifted young Americans can obtain full development. Some system of wise selection and subsequent financial aid should be devised and supported. Where are

those who will seriously question the soundness of this proposal?

It is when dealing with the problem of employment that American youth is most likely to show traces of resentment over the present situation. To young people, the full-time job is final and convincing evidence that at last adulthood has been achieved and independence established. The psychological value to youth of satisfactory employment is incalculable. Normal home and family living only so becomes possible. Self respect only so can be achieved.

The recent employment experience of youth has been frightfully discouraging. About one-third of all young people available for work are unemployed. The number of those in the United States between the ages of 16 and 24 years who are wholly unemployed is estimated at four and a third millions. Nearly six millions are either completely or only partly employed. Only a small proportion, 13 per cent, of the youth who have no work are not actively seeking work. Surveys have shown that more than half of these young people out of work have failed to find employment after periods of effort running over two and a half years.

Youth Is Stoic

American youth has thus far met the problem of unemployment stoically, but it is too much to expect that it will continue to do so indefinitely. It is high time that we all recognize that no society can long endure that leaves its young men in idleness. Measures should be promptly devised for dealing more constructively with this whole problem. Capital and labor, the schools and government should join forces in closing the present gap between the school and job. Possible extensions of the idea of the civilian conservation corps should be explored. Local communities should deal more earnestly and imaginatively with the possibilities of local community work programs. If undertakings along these lines cost money, let it not be forgotten that maintenance for the aged is no more indispensable than employment for the youthful.

Given employment, what does American youth expect of its future? In the first place, it does not look

for opportunities to accumulate large means; it recognizes that the day of the great American fortune has passed, probably never to return. But, as an offset, a measurable increase in security is looked for; in fact is demanded. At times it would appear as if American youth had grown prematurely old in its insistence upon guarantees of securities rather than upon chances for adventure.

Presumably this attitude springs from fear that the chances of successful adventure have ceased to be reasonable. For the time being, American youth is disillusioned. For it the glamor of life is in eclipse. But the spirit of adventure that always lies latent in youth will return to life. The world remains an interesting place. Science and technology continue to perform miracles and thrilling careers of invention and discovery remain open. Service to one's times still carries its rich rewards. The opportunities for social participation are expanding. Increasing leisure time lies at our disposal. If youth can come to see adequate meaning in life, if it can develop its inner resources and not attach too much importance to the material implements of daily living, it can come to view its prospects with renewed satisfaction.

Young Americans regard democracy with an attitude, not of skepticism but of frank questioning. They can see, as can all of us, that democracy is in a measure of distress, and they are led to wonder how serious the complications will turn out to be. Their ideas of just what democracy means are somewhat vague and remote from their own day-to-day living. They are likely to think of democracy as a bookish ideal of government rather than as a concrete system of close human relationships. They wonder whether democracy can maintain a satisfactory level of economic efficiency, whether it can solve the problem of unemployment. They hope they will not have to choose between freedom and a decent job. They are impressed with the fact that great inequalities of human circumstance continue to challenge the concept of social justice that lies at the heart of democracy. On every hand they observe

a distressing lack of social unity or of any consolidated social purpose.

As to the causes that provoke wars, American youth is plainly cynical. It is convinced that interests, not principles, ordinarily prevail, and that popular support for any war can be obtained provided those in power have full possession of modernized instruments of propaganda.

Cynical About War

American youth is all for peace; yet it does not appear to be for "peace at any price." Our young men would be quick to arm if a foreign invasion were threatened or if the territorial integrity of the continental United States were endangered. But they are not now disposed to go abroad in defense of democracy. American youth knows that the inevitable centralizations and usurpations of governmental authority in the prosecution of a great war are likely to mean the end of democratic institutions for the warring nations. American youth recognizes the terrible dilemma faced by the European democracies: not to fight may mean the loss of democracy through humiliation and final subjugation; to fight may mean the loss of democracy through political transformations deemed necessary "to win the war." Youth on this side of the water is thankful that America does not face this dilemma.

American youth expects another European war and expects the United States sooner or later to be drawn into it, but its attitude toward this prospect is not one of willing sacrifice but of fatalistic submission. Unhappily, as American youth views the present world, there is little left that is really worth fighting for. A young Danish contributor, Per Sorensen, puts it this way in the columns of the February *Atlantic Monthly*: "The Gospel of Progress is gone; left is the Gospel of Work."

Undoubtedly, it is the absence of enthusiasm, the lack of passionate devotion to any cause at all that more sharply than anything else characterizes American youth of this generation.

Youth has its part to play in social planning, and let not its failure to speak be taken as a sign of either indifference or complacency.

National Aid Is Imperative

FLETCHER HARPER SWIFT

University of California

NO ISSUE confronting the friends of public education in the United States today is more important and none is attracting more attention than that of federal aid for public schools. Although the policy of granting continuing federal subsidies to the states has been vigorously fought during the last two decades, the policy of federal aid in the form of land endowments and vast monetary grants is practically as old as our republic.

The farsighted leaders who directed the destiny of our republic during the period of its infancy saw clearly the impossibility of establishing, much less of perpetuating, a democracy without a system of universal education. Nevertheless, it must be admitted with shame that public education in the United States has never been universal, never been democratic, never universally free.

In 1935, 2,740,000 of our children and youth were entirely without schools and another 2,745,000 were attending school in temporary and totally unfit structures. Hundreds of thousands of children who do attend school are taught by teachers notoriously underpaid and, consequently, untrained, ignorant and totally incapable of performing their tasks. In 1934, nearly one-half of all the teachers in one room schools and more than one-third of those in two room schools received annual salaries of less than \$500 and an annual wage of \$200 or less was not uncommon. Cut school budgets, shortened school terms, thousands of closed schools, tens of thousands of unpaid teachers, millions of children denied any educational opportunity whatever, these are the facts and conditions that constitute the appalling indictment of American education not only in years of economic depression but in years of prosperity.

Every congress that has assembled since the World War has been confronted with one or more bills designed to create a system of federal subventions for equalizing educa-

tional opportunities. The widely discussed Harrison-Thomas-Fletcher Bill, first introduced into congress in 1936, if passed will provide annual subventions to be distributed among our states and territories amounting to \$72,000,000 the first year and increasing until the maximum to be distributed annually will amount to \$202,000,000.

Of the many disastrous outcomes of our nation-wide inequalities in wealth and in educational opportunities, none is more menacing to our democracy than the high degree of widely prevailing illiteracy. In 1930 more than 4 per cent of our adult population was illiterate, but in England the illiteracy figure is only slightly more than .3 of 1 per cent; in Germany, .03 of 1 per cent; in Norway, .001 of 1 per cent. The United States far outranks each of these nations in wealth, but in not one of these or in many other European states can be found a single instance paralleling the situation ex-

assumed by state and national authorities in European countries and in the United States.

The earliest schools for the masses in England were established and supported by church, philanthropic and other voluntary organizations. These schools are still known as voluntary schools, whereas schools established by county councils and other local education authorities are known as council or provided schools. The first national grant for elementary schools was made in 1833 to aid in erecting voluntary school buildings. National grants are now given for council schools and for church schools, not only for buildings and other capital outlays but for salaries, pensions, scholarships and all other current expenses.

In England all educational institutions, except elementary schools, are classed as institutions of higher education. All public grant-aided elementary schools are free schools. Institutions of higher education com-

In showing the need for federal aid to education in this country, Professor Swift summarizes some of the significant features of the English and French systems of national aid to every level of education

isting in Chicago in the years 1931 and 1932 when, month after month, teachers received no salaries. Dayton, Ohio, closed all its schools for three weeks in November 1938 owing to lack of funds and reopened them with the announcement that schools would close again "when and if funds ran out."

No one factor is more responsible for the humiliating contrast in educational provisions and literacy between the United States and European nations than the difference in the degree of financial, administrative and supervisory responsibility

monly charge tuition fees although some grant-aided secondary schools are entirely free and every grant-aided secondary school must provide free tuition for at least one-fourth of its pupils.

No less than nine national ministries and departments share the responsibility for administering and apportioning national grants for education in England and Wales but 90 per cent of all grants are administered by the national board of education, which is essentially a ministry of education. The board of education has almost unlimited control

over the grants it apportions. It makes and can change at will the regulations covering grants, the methods and bases of apportionment and the requirements for participating in grants. At the present time, the board reimburses local authorities for 50 per cent of their expenditure for all forms of higher education. Grants for elementary education are apportioned on the basis of a somewhat complicated formula. In the year 1935-36 national grants provided 56 per cent of the funds expended on public elementary schools and 52 per cent of the receipts for grant-aided secondary schools.

Probably no single factor is more important in equalizing the quality of instruction and, consequently, educational opportunities than a satisfactory salary schedule. If such a schedule is nation-wide in its application, its equalizing influence will be nation-wide also. In England and Wales, all teachers in public elementary grant-aided schools are paid according to one of three national salary scales, based on differences in costs of living. National salary scales have been formulated also for teachers employed in secondary schools and in technical and art schools. Although these scales are not obligatory, they have been widely adopted in these countries.

In Contrast to England

Up to May 1, 1937, only 28 of our states had provided for state-wide teachers' pension systems. In New Jersey, which pays the highest retirement allowances of any state in the Union, annual pensions varied from \$5103 to \$83. Contrast this situation with the situation in England where all teachers in grant-aided educational institutions are beneficiaries of national pension systems.

The French system of education is one of the most highly centralized and one of the most completely nationalized systems in existence. This is especially significant since the present system evolved from what was once a decentralized system. In 1889 the state abolished local taxes for elementary schools, established in their place an equivalent national tax and assumed the responsibility for paying the salaries of all teachers and

other officials serving public elementary schools.

As it is today, the state pays the salaries of all teachers and other officials serving elementary schools, secondary schools, universities and all other public educational institutions. Teachers and all other educational officers are paid according to national salary scales. Consequently, thousands of children living in remote rural districts are taught by teachers as well trained and receiving salaries as high as teachers employed in the largest cities.

Encourage Child Bearing

The salary systems prevailing in England and in the United States penalize teachers having children. In France, teachers and all other state employes receive, in addition to their salaries, an annual allowance for every dependent child. Again, in marked contrast to English and American practices, France encourages married women not only to continue in public service but to bear children. Every expectant mother in the employ of the state is granted maternity leave with full salary two months before and two months after confinement.

Then, also, numerous other maternity aids are provided, including allowances to cover all expenses in connection with confinement and, following the birth of a child, a milk bonus for all mothers and a special milk bonus for mothers who nurse their offspring.

The health and physical well-being of the teacher are a matter of deep concern to the state. During an ordinary illness, a teacher is entitled to a three months' leave of absence with full pay. Teachers suffering from tuberculosis or mental disorders may be granted sick leave with full salary for three years followed by a two years' leave with half salary.

Ever since 1853, France has maintained a national system of pensions for the benefit of all state employes. The present system is both compulsory and contributory. Beneficiaries must contribute 6 per cent of their annual salaries. Costs and claims that cannot be paid from the contributions of employes are met by annual state appropriations. Pensions are based on the length of serv-

ice and range from one-half to three-fifths of the average annual salary received during the last three years of service.

In addition to grants for current expenses, the national government makes grants for school buildings. The amount of the grant is based upon the wealth of the community to which it is paid and the rate of the local tax levied for school building projects.

At least two decades have passed since the term, "the educational crisis," began occupying a prominent place on the pages of journals of education in the United States. A study of the history of school conditions in the United States will show that the so-called crisis or crises have merely been sharp upward trends in a pathologic school situation that has been with us throughout our entire national history. Thanks to the vision and social sensitivity of our present national administration, the federal government during the year 1933-34 for the first time in the history of public education advanced funds directly to individual schools or to teachers. The total emergency funds allotted to educational purposes in the year 1933-34 amounted to \$159,232,782.

Shall It Be Permanent?

The policies inaugurated in 1934 were continued throughout the biennium 1935-37. The question confronting the citizens of the United States today is whether these emergency policies shall be given permanency and stability by embodying them in a system of continuing national aid. Shall this be done or shall selfish vested interests be allowed to defeat these necessary measures and, by defeating them, perpetuate illiteracy, social and educational injustice, and thus disseminate seeds of ignorance and social dissension throughout our body politic?

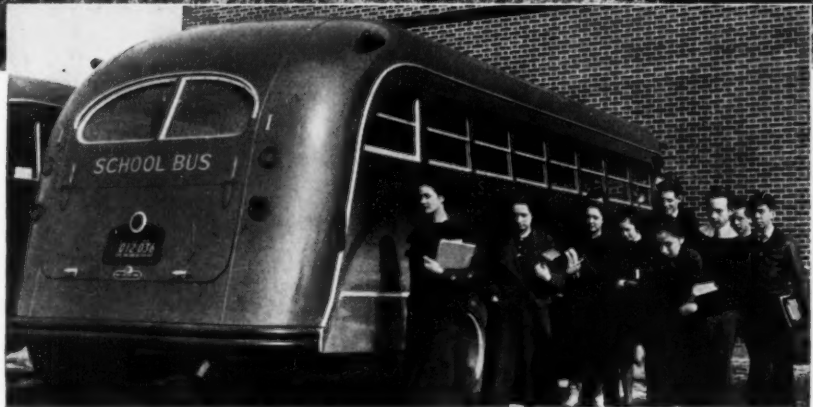
Also, shall our system of public education, the only sure foundation of our democracy, be undermined by its enemies? Shall the proposals for a system of national school aid be defeated by the organized efforts of selfish vested minorities, or shall education be made truly free, universal and equal?

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High Schools or Peasantry?

M. M. CHAMBERS

Specialist in School Law

IT IS no overstatement to say that the ideal of making a good high school accessible to every child able to make good use of it has been adopted by the American people. This admirable aim is as yet far short of realization. It is obstructed by many obstacles in remote and sparsely populated rural corners, as well as in the suburban "vicinages" of large and small cities in many places.

In small rural school districts unable to maintain high schools of their own, the qualified resident pupils usually must travel considerable distances to reach a public high school and its demands for nonresident tuition fees must somehow be met.

Several states require the home district to pay these fees and some statutes also require the home district either to supply transportation, to reimburse the parents for it or to pay for the room and board of the pupils near the designated high school within a specified maximum cost. These provisions are excellent but are by no means universally in existence where needed; often they fall short of solving the problems involved.

A surer method of guaranteeing that funds will be available to reimburse the districts that receive nonresident pupils is afforded by providing that these fees shall be paid in whole or in part by a larger taxing unit, such as the county school district or the state itself. Only a few states as yet have made the state fully responsible for these charges but there is a commendable tendency in that direction. The growing extension of state financial aid to all local school districts tends to simplify the matter somewhat.

In addition to the mere matter of the physical accessibility of some high school to every qualified prospective pupil, there is also the important matter of the nature and

quality of the school to which access is made possible. Many hundreds of our rural and village high schools are so small in enrollment and meager in facilities that the offering of varied curriculums may be said to be impossible or, at least, severely limited. In many cases the meagerness of the staff and equipment makes the quality of any of their offerings open to serious question.

This is not to gainsay that the high school having as few as 200 pupils, or even less, under exceptional circumstances can perform a valuable service and fill an indispensable place.

If rural and small village boys and girls are denied the varied educational offerings of the large urban high school, it will follow that there will be a widening gap between rural and urban culture in America

The time has come to shout from the housetops, however, that large numbers of rural youth stand in great need of types of secondary school instruction, including a realistic introduction to vocational education for nonagricultural pursuits, which cannot well be made available in the small rural high school and which are not readily accessible in any institution within their reach. Well-known trends in population, based on the relatively high prolificacy of rural families and upon the declining demand for manpower in agriculture, clearly foretell that considerable numbers of youth now growing up on farms and in villages will inevitably migrate cityward in the future. This has implications for

rural education that ought not to be ignored.

Moreover, the need for nonagricultural vocational education is only one part of the picture, and to many thoughtful persons it seems the smaller part, although of itself it is of great importance. Varied offerings in the arts, including music in its numerous forms, as well as extensive library facilities, instruction in many kinds of physical education and in recreational and social participation and leadership, now available as a matter of course in urban high schools, cannot be provided on a comparable scale in the small village or rural high school. All these things are coming swiftly to be widely diffused in a common American culture. If rural boys and girls are to be denied them, we shall have a widening of the gap between city and country and a trend toward the reduction of the American farmer to peasantry, with his sons and daughters drifting cityward to become an exploited substratum.

An example of the limitations on educational opportunity now available to rural youth in a state that is relatively progressive educationally appears in Kentucky. It will be remembered that this state enacted an excellent modern school code in 1934, facilitating long steps forward in the consolidation of rural schools and in the provision of high school facilities for rural children of both races. Although the new code and some of its subsequent amendments represent great advances, yet a lawsuit recently arising in Caldwell County serves to point out that rural children, even when residing not far from a modern city high school, may be required to attend a rural school not only less conveniently located but admittedly inferior as an educational institution.

In Caldwell County, a high school is maintained by the independent school district of the city of Princeton. There is a similar independent high school district in the county for

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the town of Fredonia, and a third just across the county line at Dawson Springs in Hopkins County. The county board of education, having no jurisdiction over the independent districts just named, maintains four small rural high schools in the county, at Cobb, Flatrock, Friendship and Farmersville (good American rural place names!).

In 1936 the state board of education made a survey of the county and recommended that these four high schools be abandoned and that the county board should contract with the independent districts of Princeton and Dawson Springs for the attendance of all rural pupils of high school grade at these high schools.

Court Is Powerless

The recommendation has not been followed and the county board refuses to provide for the attendance of any pupils under its jurisdiction who would prefer to go to either of the city high schools, even if they reside much nearer thereto than to any rural high school. The parents of several pupils so situated petitioned the courts to compel the county board to allow the pupils to attend the high schools most convenient to their homes. The court of appeals felt unauthorized to grant the petition, pointing out that a statute of 1938 requires all county boards of education to provide high school service for all resident children of high school grade, either by maintaining high schools or by transporting the pupils to suitable schools in independent districts or in other counties.

At the present time the Caldwell County board is complying with this statute by maintaining rural high schools and the court is powerless to compel it to do otherwise.¹

The result is that a small and remote rural high school is the only school open to free attendance by pupils who live nearer to larger and presumably better schools in near-by municipalities. The situation cried aloud for intergovernmental cooperation between the local school authorities concerned.

Seven years ago the state of West Virginia took the bold step of abol-

ishing all independent school districts and making the entire county a single district, including the cities therein, with the whole under the immediate supervision of the county superintendent and the control of the county board of education. This is the full-fledged county unit, which exists also in Maryland and Louisiana, and, in some instances, elsewhere.

Whether this is the ultimate solution of problems such as those just noted in Kentucky or whether the situation can be improved by encouraging or requiring interdistrict agreements cannot be hastily said, but one can assert that the problem of making good and convenient high schools accessible to all rural pupils is one that merits redoubled study by state legislatures and state education departments as well as by local school authorities, both urban and rural. The Kentucky situation is typical of a great many similar stalemates that exist in nearly every other state.

Another example has reached the supreme court of Utah, wherein high school pupils residing in the immediate environ of the city of Logan are refused admission to the city high school except upon the payment of substantial tuition fees by their parents. The court is powerless to afford relief because the county school district provides rural high schools that are open to such pupils free of charge, and under the present statutes neither the county nor the city is under any obligation to do anything further.² The situation is not affected by the fact that the parents concerned in this case all conduct businesses in the city of Logan and are substantial taxpayers to the municipality and its school district. This dilemma of suburban residents can be duplicated, after a famous phrase, "in a hundred cities and a thousand towns."

Thus it appears that providing a good high school for free attendance by every qualified pupil in the land is not merely a matter of consolidation of rural schools or of merger of rural districts, but it involves a great deal of inventive pioneering toward the building of new cooperative re-

lationships between urban and rural school districts. In these efforts the mediation of the state educational authorities can no doubt supply important contributions. The whole nexus is an interesting phase of the increasing need of intergovernmental cooperation, both horizontal and vertical.

It is well to notice, too, that placing the control of city schools under the municipal corporation and abolishing the urban school district, warmly advocated by a minority of theorists, would be no answer to the difficulty here faced. In fact, it might be said to tend toward sharpening the cleavage between city and rural schools, for city governments are distinctly less amenable to state supervision than are public school districts.

A Clear Mandate

The extension of education can come only through the efforts of educators themselves. For educators to rely on politicians in this crisis is to admit incompetence and to invite defeat. Many times in the past school officials have presented an extended program of secondary education to committees of the legislature under unfavorable and often definitely hostile conditions. The results have been uniformly the same—"report received and filed." There was no clear mandate from the people that a program of extension was needed. Until such a mandate is registered from the people that a program of extension is needed, little or nothing can be expected from legislatures.

As a group educators have ignored and distrusted their constituency. If American educators believe in democracy, if they believe in extended secondary school system, if they believe that education can be a vital force in the improvement of society, then they must be consistent with their faith. They must present to the people the reasons for the extension which is needed, the philosophy behind it, the method of financing it, and through the conviction which their program carries bring that program to success.—From *Issues of Secondary Education*, Department of Secondary School Principals, N.E.A.

¹Stallins et al. v. Caldwell County Board of Education, (Ky.), 120 S.W. (2d) 656 (1938).

²Logan City School District v. Kowallis, (Utah), 77 Pac. (2d) 348 (1938).

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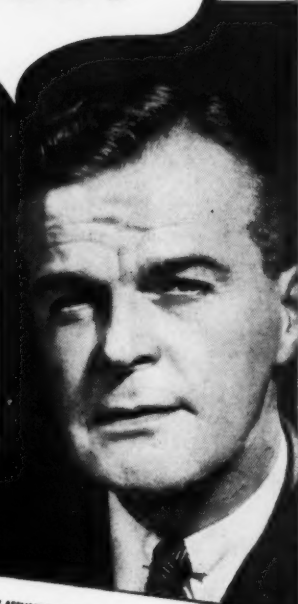
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Scrubbing	E	Colgate
Washing	F	Colgate

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LEGEND

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Colgate - For polishing and shining.

Colgate - For disinfecting and sanitizing.

Colgate - For scrubbing and scouring.

Colgate - For washing and rinsing.

SOAP APPLICATION DIRECTIONS FOR SCHOOL CLEANLINESS MAINTENANCE

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Colgate and soap products are about the same and need only one cleaning application to make a surface clean. They should be used in such a way that the surface is not over-cleaned. One should be sure to use the proper amount of soap for the job. One should be sure to use the proper amount of water for the job. One should be sure to use the proper amount of effort for the job. One should be sure to use the proper amount of time for the job. One should be sure to use the proper amount of money for the job.

Preparation of Cleaning Solution

For general cleaning, use 1 ounce of Colgate soap per gallon of water. For scrubbing, use 2 ounces of Colgate soap per gallon of water. For washing, use 1 ounce of Colgate soap per gallon of water. For rinsing, use 1 ounce of Colgate soap per gallon of water. For disinfecting, use 1 ounce of Colgate soap per gallon of water. For polishing, use 1 ounce of Colgate soap per gallon of water. For shining, use 1 ounce of Colgate soap per gallon of water.

Application

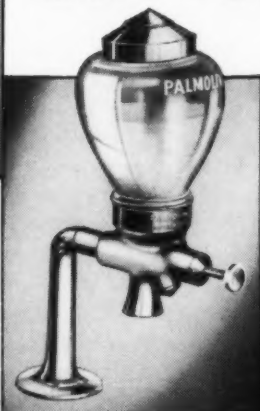
Apply the cleaning solution with a brush, sponge, or cloth. Rub the solution into the surface. Rinse the surface with clean water. Dry the surface with a clean cloth.

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Gang Showers for Girls

HARRIET V.
FITCHPATRICK



Left: Entrance to girls' showers. Below: One of the most satisfactory types of gang showers for girls.

WHAT school system twenty years ago would have approved gang showers for girls?

Experiments in gang or group showers for girls in the Cleveland public schools cover a ten year period. The first attempt to use an open shower room began in 1927 in a junior high school. This building had just completed a new physical education unit, including one gymnasium for both boys and girls and two locker rooms. The boys were provided with shower facilities while the girls had none. Several girls in the building inquired why they could not use the boys' showers. After much discussion by school authorities, it finally was decided that the boys' shower room should be available to girls at certain periods during the week. Thus, the first gang program for girls was inaugurated. From its inception showers were provided for all girls on a voluntary basis.

During the first year only 100 girls made use of the rather unusual opportunity. However, at the end of two and one-half school years, gang showers were used by 450 girls. The latter number represented the following percentages by grades of

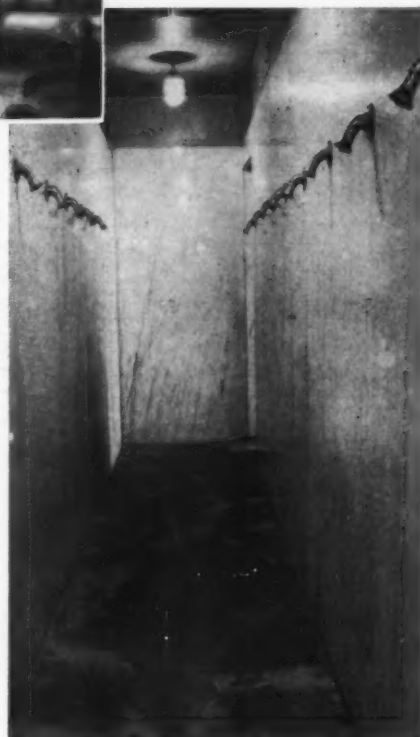
the total enrollment: 7B, 71 per cent; 7A, 79 per cent; 8B, 71 per cent; 8A, 46 per cent; 9B, 50 per cent; 9A, 44 per cent.

During this entire experimental period only two parents were sufficiently interested in the innovation of gang showers for girls to make complaints to school authorities. Since the program was voluntary the parents who protested were content to have girls other than their own take showers.

With the new building program well under way it at once became apparent that some definite policy should be taken with regard to the type of showers to be built for girls. With the apparent success of the gang shower in one school during a period of four years, it was agreed that all new buildings should be so equipped. It also was agreed that each new building having a gang shower should be equipped with at least two or three individual showers.

A few of the reasons why gang showers were popular in a new building program are as follows:

1. Building cost is reduced.
2. Supervision of showers is easier than in an old style locker room with individual showers.

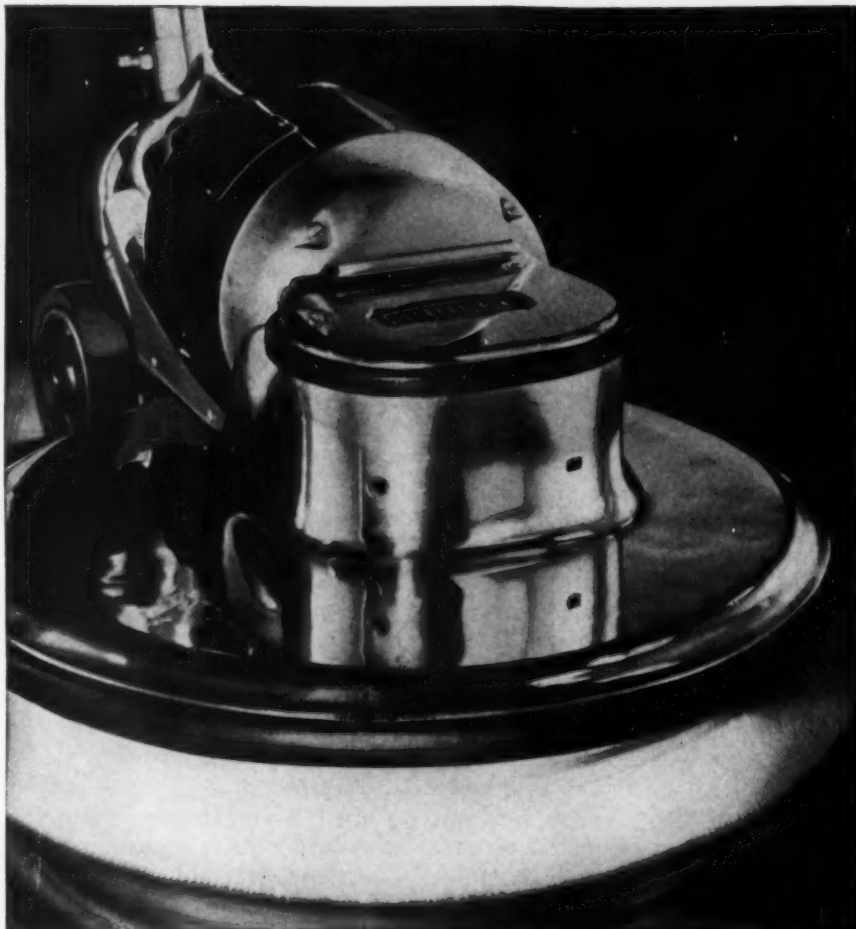


3. A minimum amount of time is necessary for taking showers.

4. With central control of water, health hazards are reduced.

Thus in a new building program it does not mean that all individual showers are relegated to the scrap heap but rather that a modern locker room contains one open shower room and a minimum number of individual showers. Women teachers of physical education are most enthusiastic in expressing their opin-

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ions regarding the gang shower. Little urging is needed in getting girls to take showers; many girls are now taking showers following intramural programs.

At the present time in the Cleveland public schools, there are nine junior and senior high schools equipped with open shower rooms for girls. Of these schools, four were built in new buildings while five schools have remodeled their locker rooms. Cost of remodeling is entirely dependent upon the amount of work to be done and the type of shower construction.

During a ten year experimentation period the most satisfactory type of open shower was found to be the long, narrow room having shower

heads on either side of the wall. These are set approximately 5 feet high, so that the arc of water will fall shoulder high or below. This is most important since girls do not like to get their hair wet. The water is operated by central control and is graduated from warm to cool.

It is important that the cold water be slightly tempered. This was not done in a few of the older buildings and complaints were received that the water was too cold. All present mixers have the cold water tempered. The needle-point spray for gang showers has not proved satisfactory because it does not produce a sufficient flow of water. An antiseptic foot bath solution is placed at the exit of the shower room.

fectants with definitely proved germicidal qualities should be employed. The strength of disinfectants is measured in terms of their phenol coefficient."

Deodorants, sometimes wrongly designated as disinfectants, often are worse than useless, in the opinion of the Oregon committee. Germs are not killed by odors. The odors are often disagreeable in the toilet room and sometimes permeate into the corridors. The purpose of a deodorant is to cover up rather than to remedy a bad condition resulting from an unclean toilet room. Deodorants should, therefore, be taboo. Even disinfectants that have the least odor should be chosen, provided they are as good as the others.

If there is a floor drain, basement toilet rooms may be flushed with hot water. This method should not be used in rooms containing much woodwork because steam will injure it. There should be sufficient radiation to dry the toilet room after it has been flushed.

"Mopping, with an occasional scrubbing, is probably the best means of cleaning toilet room floors," says the Oregon manual. "Small spaces should be mopped and dried before proceeding to other spaces in order to avoid tracking in case the room is in use while it is being cleaned."

"A strong cleansing solution should be used also for cleaning toilet bowls, urinals, lavatories and sinks. Toilet bowls and sometimes urinals are difficult to clean because of shoulders over the grooves from which the water flows into them. Dangerous bacterial cultures, which also produce permanent odors, will accumulate in such places if they are not cleaned."

"The bowls should be flushed, after which a strong solution of hot cleanser and disinfectant should be poured into them. This should be allowed to stand for a few minutes and then all parts of the bowl and seat, including the grooves, should be washed. Better cleaning will result from the use of a hand mop cloth. A more agreeable but less effective means is the use of a hopper brush. One that is curved at the brush end will be best, if the janitor is to reach beneath the shoulder, because the ordinary straight hopper brush will not reach such places."

Points on Toilet Maintenance

"THE work of cleaning toilet rooms is not one specific job. It consists of a number of jobs requiring different frequencies of performance."

This statement from "A Manual on the Construction and Care of School Buildings," issued by C. A. Howard, superintendent of public instruction, Salem, Ore., leads to a discussion of what these specific jobs are.

According to Troy D. Walker, high school principal at Baker, Ore., and D. A. Emerson and Dr. V. D. Bain of the state department of education, they are: "sweeping, mopping, flushing, or scrubbing of floors; the cleaning of bowls, seats, urinals and the floor in front of urinals; the cleaning of lavatories, sinks and mirrors; the cleaning of woodwork, partitions, walls and ceilings; the cleaning of chains, handles and door knobs; attention to the flow of water in bowls and from faucets and the drains from bowls, urinals and lavatories; attention to the ventilating apparatus; the supplying of toilet rooms with paper, towels and liquid soap, and the supervision of toilet rooms. The cleaning jobs usually include disinfection as well as the cleaning itself."

Some of the foregoing jobs should be performed as frequently as sev-

eral times a day under certain conditions, the Oregon manual states.

"Toilet rooms should be well ventilated by a separate system that may be operated when the building ventilating system is not in use. This is important also because toilet room air should not be mixed with classroom air for recirculation. An exhaust system will be best, since it creates a partial vacuum so that when toilet room doors are opened air rushes in instead of out. A plenum system is unsatisfactory for toilet room ventilation because the extra pressure forces air into the corridors when the doors are opened."

"Timed flushing toilets should not be used. Toilets should be flushed immediately after they are used. Timed flushing of urinals may be advisable since it is difficult to habituate boys to the practice of flushing urinals after use."

"The water used for cleaning toilet rooms and fixtures should be treated with a strong solution of cleanser. A strong solution will not harm tiled floors and slate or porcelain fixtures. A disinfectant that is a real germicide, such as formaldehyde, phenol or some other coal tar product, may be added to the water that is used for cleaning. The only way to kill germs is to bring the disinfectant into contact with them. Only disin-

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From 50 to 1000 Square Miles



Twelve buses transport 415 pupils from outside the district to Aitkin, Minn.

L. C. MURRAY
Superintendent of Schools
Aitkin, Minn.

THIS is the story of the phenomenal growth in the public schools at Aitkin, Minn., during the last eight years, in which a school bus transportation service expanded a small consolidated school district of 50 square miles to an area twenty times that size, or 1000 square miles!

Eight years ago a survey disclosed that only a small percentage of eighth grade boys and girls in the county was attending high school. This was a challenge!

When more was learned of the financial condition of many of the families of the county and the apparent lack of interest, it was apparent that a program of school advertising was necessary if the boys and girls were to be brought into the secondary schools. In recognition of this need, a joint program was developed and presented to members of the Aitkin board of education. Because of the progressive and intelligent views of this group, the following program was adopted:

1. The publication of a handbook that presented the philosophy of the school, the value of high school attendance, information regarding classes offered and method of registration, and general information of interest to pupils already in attendance. These handbooks were sent free to every eighth grade graduate.

2. An invitational rural school track meet, which included all the rural schools of the county, was held. The Aitkin schools gave awards for high scoring track teams, first and second place winners of the kitten-

ball tournament, and for the two schools that brought the largest delegation the greatest distance.

3. Groups from the music and dramatic departments presented programs in a large number of rural schools. Adult and pupil speakers were furnished for their programs and in every case an effort was made to encourage attendance at some high school.

This program to develop interest in high school was carried on during the spring of 1931. In the fall of 1932, there was an increase in registration of more than 100 over previous years. As a result of a continuous program, in 1938 there were 415 nonresident pupils as compared to 116 in 1930.

The first year of this unusual growth, the duties of the dean of girls and dean of boys were increased. These additional young people had to be taken care of in the homes of the city. This was a difficult problem. But transportation was the only solution. In 1932 a survey was made through the cooperation of the state department of education and the local superintendents.

This survey revealed that the closing of the smaller schools and the transportation of pupils would effect a saving of \$50,000 a year in the county. So much opposition developed, most of it from rural school board members, that it was decided not to press the matter. One of the chief objections presented was that it would be impractical to transport pupils from 25 to 30 miles per day.

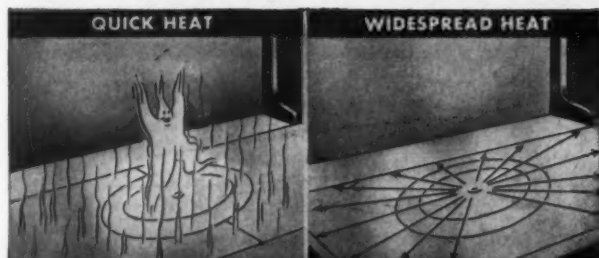
The plans called for the transportation of rural pupils to and from their own homes. There were four main centers of population from which pupils came. The members of the school boards, as well as forward-looking individuals in these communities, were contacted and urged to make plans for large buses to transport the pupils in their communities to the Aitkin High School. Opportunities to pick up other high school pupils along the highway were pointed out.

The first year only one community responded, Palisade. A Palisade man purchased a large 45 passenger bus. The Palisade board of education paid for the transportation of the pupils in its own district. The driver picked up additional passengers along the route until the bus was filled. The bus came from a community 22 miles from Aitkin, a round trip of 44 miles. The next year one of the districts to the north, Swatara, a distance of 66 miles, round trip, joined in the plan. The same year another private route was established to the south, a round trip distance of 32 miles. The following year, the Malmo route of 52 miles was established, as well as a second route to Palisade, 44 miles.

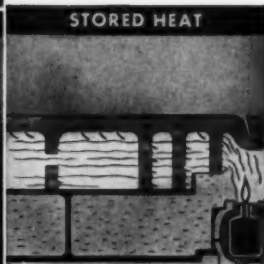
At the present time 12 buses transport 415 high school pupils to the Aitkin High School from outside the school district.

The federal pupil aid and the Minnesota high school pupil aid have been the means of bringing about a greater equalization of educational opportunity in the state than ever before. At the last session of the legislature a bill was passed for an appropriation which made possible the payment of part of the costs of transporting nonresident boys and girls to high school, provided the local rural school district was willing to pay a part of this cost. According to the regulations issued, the rural board could not receive back from the state more than two-thirds of the amount spent for this purpose.

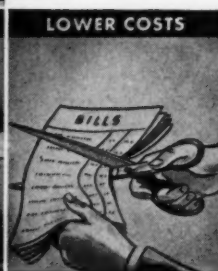
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Learning From the Lunchroom

THIS is the day of integration and correlation of subject matter in educational thought. We have come to realize that a child's interest can best be harnessed by the presentation of life situations. Surely there is no need to cite examples of the types of subject matter correlations that may be accomplished through the school lunchroom. However, there are other educational opportunities of a nonacademic nature that the lunchroom may stress.

One obvious educational opportunity offered by the school lunch is that of improving food habits and food standards. Just as poor school lunches can develop a taste for the undesirable, they can likewise create a distaste for wholesome, necessary foods. It is the task of the school lunchroom manager to use salesmanship on the foods that children should eat for their own good. Interesting plate combinations will help to do this, especially if they are carefully priced. Children love bargains and a low-priced combination eliminates to a certain extent the "selection problem."

Growth Foods Are Costly

Many of the foods that growing children need will show little profit but that fact should not cause great concern. "Resale" foods are still being sold over school lunchroom counters and the explanation is always: "That is what the children want." This statement is really a confession of the lack of endeavor in stimulating better food habits.

Often prepared foods are sold because they are believed to be more profitable. Usually this is not true. Actually these foods are served merely because they require less thought and labor. The use of foods of this type is often evidence of an inefficient, overworked or uninterested manager and of a budget that is poorly proportioned between materials and labor.

Another bad habit for which poorly managed school lunchrooms

must assume a large share of the blame is the "eat and run" habit. The noise, unattractiveness, rush and lack of supervision often found in the lunchroom contribute to the formation of this practice, which is typical of the American adult. If proper space and time are provided, hurried eating can be discouraged just as poor food selection can be.

An important task of the school lunch project is to put the social side of school life on a higher plane by taking advantage of its opportunity to develop friendly, courteous and well-mannered social contacts. One of the best ways of stimulating interest in this matter is through the right kind of supervision. This should be the lunchroom manager's responsibility but she may enlist well-informed teachers and capable pupils to assist her. There are many opportunities in which the lunchroom manager can cooperate in planning social activities of the school in which food is involved. The manager should not be so pressed for time or for money that she cannot assist in furthering social programs for the school.

It is one of the lunchroom manager's duties to make a bid for parent interest and cooperation in nutrition teaching. She should stress the importance of having the school lunch program presented before the parent-teacher association. At least once a year the school lunchroom should have an "open house" for parents.

Technical education is an extremely valuable project offered through the school lunchroom. Until recent years education has tended to stigmatize manual pursuits but the school lunch project is helping in breaking down this unfortunate attitude by training young people for domestic service. The supply of this type of worker is limited and the

school lunchroom can give valuable technical training in this field.

The school lunch project also provides a means of giving work to needy pupils. Self-respect is developed in a young person when he earns what he receives. Many pupils who are needy and are not receiving adequate food at home are willing and eager to work and may learn many lessons in ethics and in employee-employer relationships that will be of value in later life. Although pupil helpers may be less efficient and more expensive than other workers, this obligation should not be ignored.

Board Responsibilities

Boards of education have certain responsibilities in making the school lunchroom project an educational service unit. The first consideration is the matter of time allowed for the lunch period. It is essential in planning the school schedule that sufficient time be allotted for the lunch hour. If too many pupils are assigned to half-hour lunch periods, most of that time will be spent in line. The time allowed should be in proportion to the space and the number to be fed, keeping in mind that each pupil should be allowed twenty minutes for eating. Often an overcrowded and undesirable condition could be relieved by properly scheduling and distributing the lunch periods.

The next consideration should be that of the physical plant. In building a new high school the lunchroom should be considered as an integral part of the whole school plan and the space should not be allotted after all other units are placed. The space should be adequate, well-ventilated, properly lighted, attractively appointed and as soundproof as possible. The total floor space should be divided so that the dining room is

EVELYN SMITH

Home Economics Department
University of Illinois

TRADE US YOUR PEELINGS FOR A HOBART POTATO AND VEGETABLE PEELER!



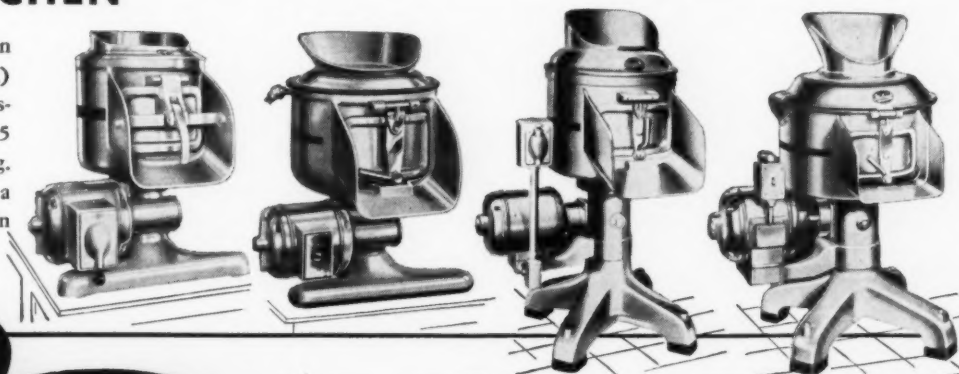
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large enough and there is still adequate space left for the necessary service rooms, thus making possible proper sanitation and high food standards of preparation and serving.

Allowance should be made for the normal growth that is sure to be necessary. Needless to say, a suitable outlay for equipment is necessary and this selection should be made only after careful consideration and upon definite specifications. Mistakes in floor plans, routing and equipment selection can decrease the efficiency of any plant and also can increase the cost of operation.

When plans are drawn up, consult the experienced and well-trained manager who is to work with the equipment and do not leave its selection to an engineer or to a purchasing agent who could not possibly know all the working problems of a kitchen and serving room unit. Obviously, the judgment of experts in each field is needed.

Not a Revenue Unit

An inadequate plant may be the result of a misconceived financial program. The original expenditure for equipping the lunchroom should be considered as part of the building expense, for the school lunchroom should be considered as a service unit and not as a revenue unit. Whether or not future replacements and additions should be purchased from lunchroom receipts depends entirely upon whether or not the lunchroom is able to finance all its educational obligations.

Obviously, no manager can meet her obligations to the educational system if she is handicapped by a rigid budget. Where many hundreds of dollars are being spent daily, a school system must have a definite and efficient business management back of it. However, this should be to handle the details of management and not to determine the fundamental educational policies.

Lunchroom managers should have their eyes on the "service balance" as well as on the financial balance. They may be proud of a 38 to 45 per cent food cost and they may be criticized if it runs as high as 65 per cent. This high percentage is often necessary if the right foods are to be sold to the children at prices they can pay. Obviously, food cost percentage will vary in different schools and localities.

However, a high food cost may not be indicative of inefficiency but of greater service.

It is difficult to set up a hard and fast rule for the ratio between individual expenditures and the whole food expense. The following is a suggested ratio, based on a study of 52 schools, by Mary deGarmo Bryan of Teachers College, Columbia University: 40 per cent, milk and ice cream; 14 per cent, fruit and vegetables; 10 to 12 per cent, meat, fish, eggs and cheese; 11 per cent, bread and cake; 3 per cent, sugars and candies, and 2 per cent, coffee and tea.

Obviously, more studies of this type are needed. A well set up cost accounting system can contribute to this study. For instance, an accounting that revealed an expenditure of 60 per cent of the food budget for "resale" or so-called prepared foods would condemn the management of any cafeteria.

An 8 or 10 per cent profit may help finance other activities in the school but it likewise may show a deficit on the side of educational service. Surely, in many communities the school lunch is a cause so worthy that, rather than its subsidizing activities, it should be subsidized, if necessary.

Often an undue amount of profit is made to support a top-heavy central organization consisting of too many supervisors and too few well-trained managers. It should be remembered that it is the intelligent planning of each day's menu, the careful supervision of its preparation and serving and the dynamic and enthusiastic interest of the individual manager that will make a successful unit. A certain amount of central supervision is necessary, but its amount will be diminished in proportion to the intelligent selection of the individual manager.

There is little doubt that a home economist trained in institution management can best handle the lunchroom job. It is essential that the lunchroom manager have the same status as a teacher and that she be obligated to the school as well as to a central business office. All home economists, however, are not adequately trained to cope with the school lunch problem. Colleges are attempting to give their students a basic training in home economics as

well as specific training in their major field. The school lunch project requires a specialist, and specific courses in institution management are given to prepare for the science of school feeding. In checking credentials, it is important to learn if the applicant has majored in foods or in clothing and if she has had such courses as quantity cookery and institution management. This should assure selection of the right manager.

In many schools the home economics teacher has the responsibilities of the lunchroom. Such an arrangement is excellent if the teacher-manager is adequately prepared and if her schedule permits good work in both activities.

Bid for College Women

Institution management courses in colleges annually are turning out hundreds of eager, alert and enthusiastic young women who are being quickly snapped up by hospitals, industry and commercial concerns. The schools should make a bid for these young women. While there are many experienced managers now in the schools who are not home economists and who are doing splendid work, this type of manager is scarce and will become more difficult to find in the future.

A few cities, Detroit, for example, have realized the need for lunchroom managers who have been specifically trained for school lunchroom work and have inaugurated a training or apprenticeship course for future managers. The students that are being graduated from colleges realize that they need practical experience and are willing to give an additional year in lunchroom training, even at a great sacrifice.

These so-called apprentices should be carefully selected from the foods and institution management majors and should be given a well-rounded experience in all phases of management and in the various types of schools. This training will give them technical knowledge, practical experience and a fine vision and understanding of the problem as a whole.

The American Home Economics Association and the American Dietetic Association have been working on this problem for several years and are about to announce an approved plan for such training.

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The new Heywood SDK 20 is a modern, streamlined, practical school unit. Both the desk and chair are combined in a single, all-steel, tubular frame which is available in either enamel or chromium plated finish. No protruding corners, no dust crevices . . . no rivets, bolts, or screws to work loose because the SDK 20 is a completely WELDED unit. The SDK 20 is posture perfect and it permits flexible seating arrangements. *May we tell you about it in detail?*

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Where Kitchen Is Classroom

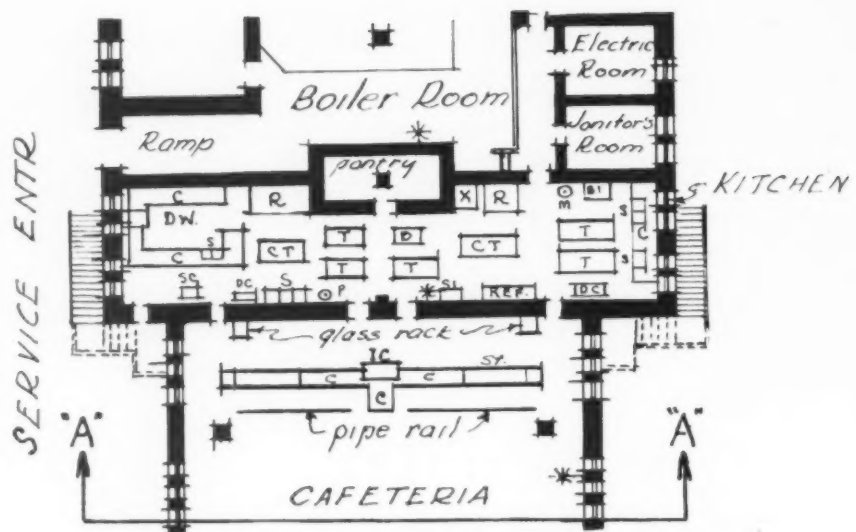
THE Thomas A. Edison Vocational School, Elizabeth, N. J., uses its cafeteria for pupil instruction as well as for school feeding. The kitchen thus becomes more important in scale than in the nonvocational school.

In this school kitchen pupils are instructed in preparing the food that is served in the adjoining cafeteria. This accounts for the location and number of ranges and sinks shown in the Section AA at the right.

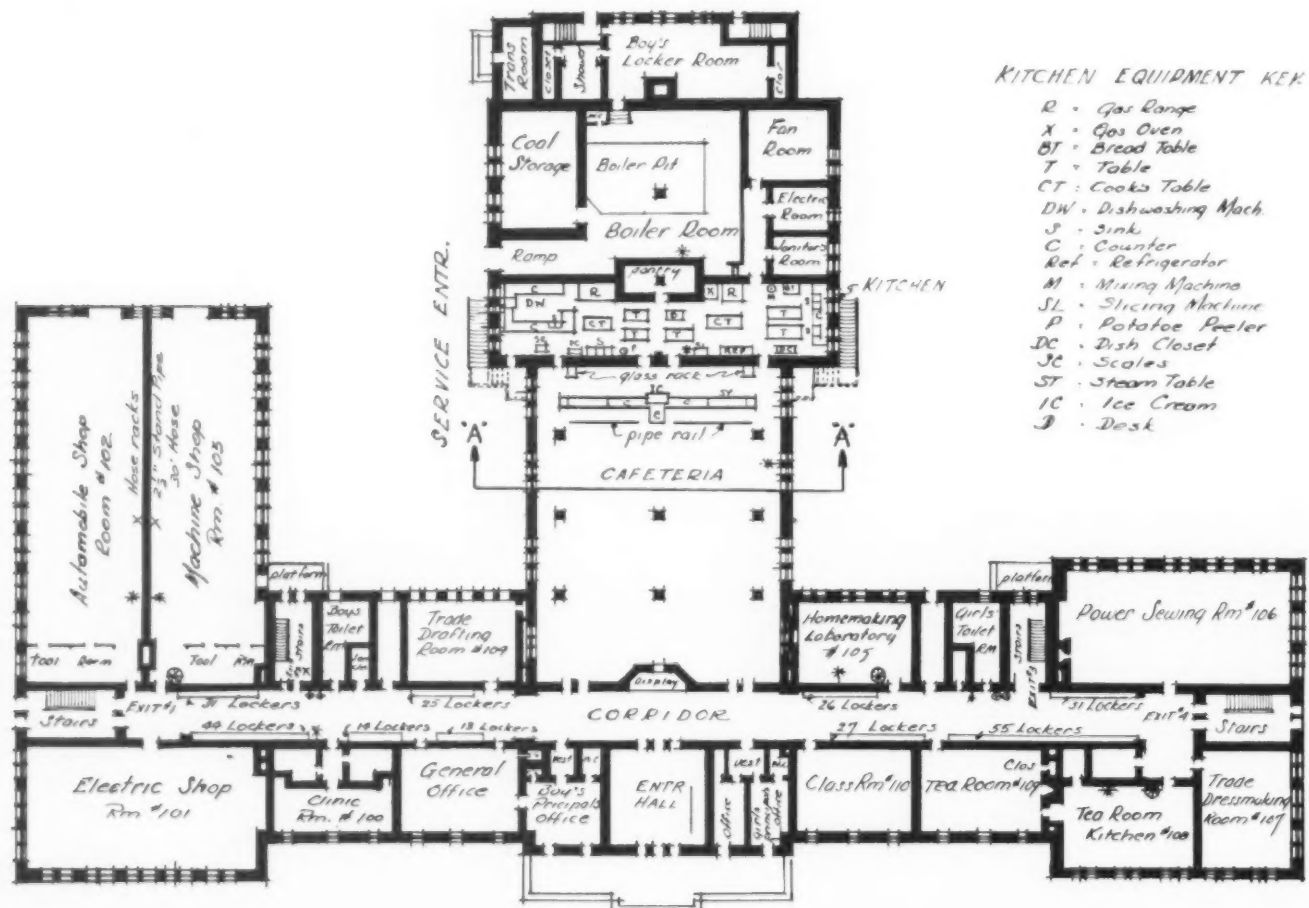
Looking at the larger ground floor plan, we note the good location of boys' and girls' toilet rooms in relation to the cafeteria. This facilitates handwashing before the lunch period.

Lockers located along the corridor adjoining the cafeteria permit the storage of books during the lunch period.

The home economics classrooms, which include a tearoom, also are located conveniently near the cafeteria.



Above: Plan of kitchen at the Thomas A. Edison Vocational School, Elizabeth, N. J., where pupils are instructed in food preparation and service. This laboratory in practical feeding is well equipped. The arrangement of kitchen equipment is workable, as will be seen by referring to the key on the plan below. Below: First floor plan of the Elizabeth school. Pupil toilets are well located in reference to cafeteria; so is the home economics tearoom.



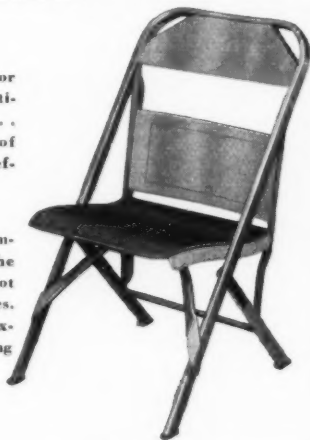
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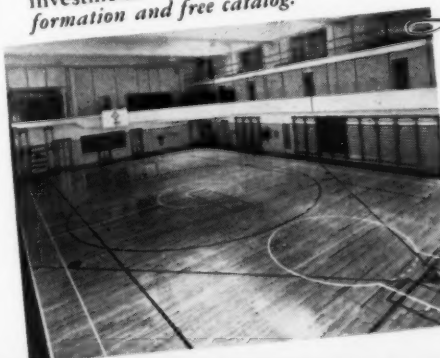
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BETTER PLANT PRACTICES



Inadequate Toilets

There is much food for thought in an investigation conducted a few months ago among 24 small city school districts in Illinois by L. R. Grimm, research director, Illinois Education Association. "To what extent does cost level influence the educational offering and environment of elementary school children in small city districts?" was the question involved.

Score sheets made for the purpose of investigating school sites and buildings were used by the director of research. On the building score sheet were: (1) material and construction; (2) architecture; (3) heating; (4) ventilating; (5) natural lighting; (6) artificial lighting; (7) height; (8) decoration and balance; (9) water supply and distribution; (10) sanitation and cleanliness; (11) type, number, location and condition of toilets; (12) fire protection; (13) general upkeep and condition; (14) location on site with reference to position and orientation; (15) possible expansion of building and flexibility in use; (16) basement; (17) stairways; (18) corridors and halls, and (19) miscellaneous items, covering janitor's room, health room, playroom, bathing facilities, central library, auditorium, gymnasium and special rooms.

Items most heavily discounted in the scoring were: toilets, ventilating, both natural and artificial lighting, provision for special rooms, stairways and water supply.

A few lines from the report dealing with the subject of toilets deserve especially careful reading: "On this matter of scoring toilets the low level schools especially show need of improvement. In one of the low level cities there was only one-half enough toilets, the washrooms were foul and unventilated and were without towels. A second city had only two-thirds of the number of toilets needed and provided paper towels torn into pieces as an economy measure. A third had only one-third enough toilets, located in a building at some distance from the two school buildings, which were located on a joint site. A fourth had foul outdoor toilets; only one-half enough

in number, with no towels and no washing facilities. A fifth had outdoor toilets in what appeared to be a substantial brick building, but no provision was made for heat, towels, washing facilities or paper."

Ready With First Aid

There are always emergencies. How are we equipped to meet them? The following list of items is suggested for first aid supplies.

2 ounces of tincture of iodine (3½ per cent) in a rubber stoppered bottle or 1 dozen iodine ampules. (If evaporation from bottle is possible, concentration will take place.)

1 ounce tube of borated vaseline.

2 ounce tube of tannic acid jelly (ointment for burns).

4 ounce boric acid solution (4 per cent).

Splinter forceps.

Scissors (small, blunt pointed).

Tourniquet (never applied continuously longer than twenty minutes).

Two triangular bleached muslin bandages (sling).

Three each of 1 and 2 inch rolled bandages.

1 dozen 1 inch sterilized compresses on adhesive.

2 ounces of aromatic spirits of ammonia.

Three ½ ounce packages of sterilized absorbent cotton.

One 10 yard roll of 1 inch adhesive plaster.

Light thin board splints of assorted sizes (fractures).

Wooden applicators wound with cotton.

Wooden tongue depressors.

Towel Supplement

Still another voice is raised on the subject of paper towels and toilet tissues. C. A. Sapper, secretary of the school district of Erie, Pa., adds his experience to that which was expressed on this page in January and February.

"We consumed 1099 cases of paper towels in 1937-38," he states. "These cost us \$2173.93, net, delivered to our warehouse. Our daily average attendance was 17,431, making an average pupil cost of \$0.1247."

It is interesting to note the specifications set up by this school system for both single fold paper towels and toilet paper.

SINGLE FOLD PAPER TOWELS

Weight of stock: Not less than 32 pounds basic weight. (480 sheets 24 by 36 inches.)

Size of towel: To be approximately 11¼ by 10½ inches.

Packing: 150 towels in each package, 25 packages (3750 towels) in a case.

Quality: Must be of good quality, reasonably soft and absorbent. To be manufactured from clean, fresh stock containing ground wood, sulphite, sulphate, or a combination of any or either. In no case shall the towel contain more than 50 per cent ground wood.

TOILET PAPER

Size of sheet: Not less than 4½ by 4½ inches, 2000 sheets per roll, 50 rolls per case, manufactured from good quality 10 pound stock, core of roll to be solid piece of cardboard. The tissue shall be perforated every 4½ inches and shall be such that when applying a tensile pull to the center of each sheet, every sheet shall be separated intact at its perforated edge.

Icy Sidewalks

March is here but still there are icy sidewalks. No need to take chances when a few fine ashes will do the trick efficiently. It's a wise custodian who starts early in the fall to save against emergency. Remember, the ashes must be fine. There is simply no excuse for throwing clinkers on the walks. If there is no screen handy, it should be simple enough to spread the ashes out thinly on the floor of the boiler room or any other suitable place for that matter. Taking an ordinary rake, eliminate the heavy clinkers and save only that material which passes through the rake.

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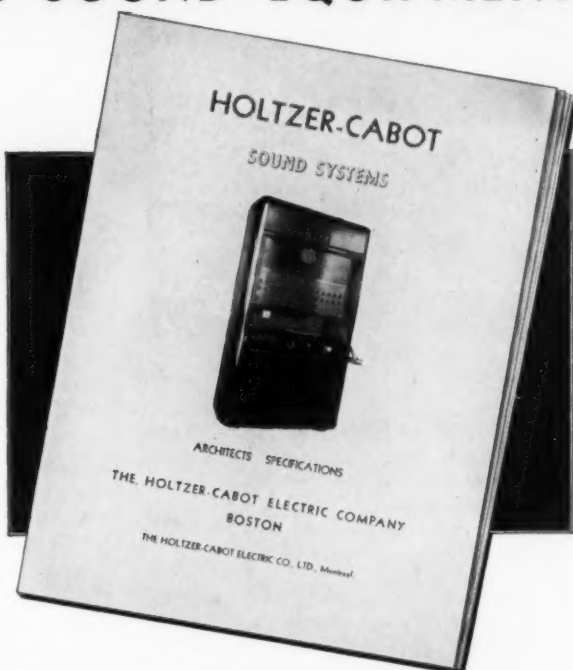
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5. **Greater Efficiency**—Delta tools incorporate many new and exclusive features not found in other tools. Vocational education instructors are praising the skill and ingenuity of Delta engineers who have pioneered the development of light power tools.

Today—Delta light power tools are meeting the needs of hundreds of schools and colleges all over the world. For the complete story in full detail—together with description and prices on the full Delta line—send the coupon at right.



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City..... State.....

WINSTON FLASHES



"EITHER or EYETHER?" Which do you use? This controversy still rages. Although the theory has been refuted that "eyether" came into the language by way of George I of the House of Hanover, many still believe that when he came to the British throne, he pronounced words in which diphthongs occurred in the German manner—by sounding the second vowel. Aping the king, the court adopted his "eyether"—hence, its place in the King's English today.

UNLIKE the earliest poetry of most countries, the oldest poems of China are lyric, not epic. An anthology, full of lovely lyrics with which every pupil should be familiar, is *MY POETRY BOOK* (grades 1-12) illustrated by Willy Pogány.

A SURVEY indicates that visitors to the New York World's Fair will spend at least \$500,000,000.

REARMAMENT . . . All territorial conquests are not made by wars. "In March, 1938, German armies motored into Austria and flew into Austria without any fighting. They took possession of the country and made it a part of Germany." This excerpt from *FOREIGN LANDS AND PEOPLES* illustrates the up-to-date content of *THE J. RUSSELL SMITH SINGLE-CYCLE PLUS GEOGRAPHIES* in which the maps are consistently revised to show new political alignments.

COMPLETE REVOLUTION of the bookkeeping-accounting cycle is achieved in a 1-year course in *BOOKKEEPING FOR PERSONAL AND BUSINESS USE*, a new text by Kirk, Alleman, and Klein.

CCC camps have taught 65,000 illiterates to read and write.

BEWARE the ides of March. For many, this month signifies spring—time to doff winter clothes and freeze in the March gales. For Latin students, it recalls the soothsayer's warning to Caesar. The study of Latin becomes live and natural as it was in the Roman days in *THE WINSTON LATIN SERIES—THE ROAD TO LATIN AND SECOND YEAR LATIN*.

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News in Review

Discourages Long Bus Trips

Cooperation of school bus operators with the Interstate Commerce Commission in its efforts to discourage the use of school buses in long distance charter transportation is urged by Carl W. Stocks, editor of *Bus Transportation*.

In its fifty-second annual report the I.C.C. calls attention to the current practice of using school buses for the purpose of transporting pupils on trips of considerable distances and into sections of the country and under traffic conditions with which the drivers are not familiar. The commission observes that while such buses may be safe for transporting school children a few miles from their homes, school buses are not equipped for long over the road operations. The I.C.C. regards the transportation of school children on such trips as a subject justifying and demanding the closest cooperation between state regulatory bodies, the local school authorities and the I.C.C.

BUILDINGS

Exposition High School

If the New York World's Fair is repeated in 1940, pupils attending the new Forest Hills High School in Queens, New York, will be able to see the midway of the fair grounds from their classroom windows, for the new structure will be constructed on a 10 acre plot near the fair grounds. When the fair closes and a park is placed on the grounds, the Forest Hills school is expected to reap the benefits of the playground provided by the park facilities.

The new \$3,225,000 structure was designed by Eric Kebbon, recently appointed architect for the New York board of education. The building design is a modified Georgian style, with sides of red brick, a gray slate roof and a limestone trim. It is intended to relieve the overcrowding in Newtown, Grover Cleveland and Jamaica high schools. Its doors will be opened in September 1940.

Of Community Design

New York City this year will open 22 new public schools, five of which are in the high school division, climaxing a five year building program. While the completion of these schools will not completely eliminate overcrowding, a sizable dent will be made. Altogether, 54 schools are now under construction in New York, some of which are in the

blueprint stage. Most of them will be completed by 1940.

Gone forever, school officials say, is the factory-like school structure. Each new school is designed to harmonize with the community and to have individuality and dignity. Besides the artistic exterior of the new buildings, provision is being made for ample park and playground facilities.

LEGISLATION

Rural Reactionaries

Public hearings in Albany and throughout New York State are being held on the proposal for modernizing rural school facilities advanced by the board of regents, because of opposition that has developed in rural areas. Features of the plan seemed to spell the doom of "the little red schoolhouse" through compulsory consolidation.

The plans for consolidation, which were submitted to the legislature by the board of regents, are an outgrowth of the recent inquiry into education in New York State.

The board of regents is explaining the plan to the public, contending that it does not mean the compulsory closing of smaller school districts. It has announced the appointment of a temporary state commission for the establishment of school districts in which each county is guaranteed local representation. Provision is also made for appeal to the board if the voters of any school district are not satisfied with the districting plans of the local committee or of the state commission. The regents thus emphasize that the bill retains the established principle of popular vote in local school affairs.

HEALTH

Halt Deafness in Childhood

The number of deaf adults could be reduced 50 per cent if the ears of school children in the primary grades were periodically examined and treated.

This is the opinion of Drs. S. J. Crowe and John W. Baylor of Johns Hopkins University school of medicine.

The most common type of middle ear deafness in adults begins during childhood. Often it progresses so gradually and insidiously that it may not become evident until it is too late to correct the primary trouble and to restore the hearing.

The Baltimore otologists suggest that

Maycomber Vocational School (Toledo, Ohio) likes the **COMMODORE'S** light



Wakefield **COMMODORES** light the library, cafeterias and academic classrooms. Lighting planned by Gil Southern, Electrical Engineer, Toledo Board of Education.



... selected by test

When specifications were being drawn up for Toledo's new Maycomber Vocational School, Gil Southern, Electrical Engineer, Toledo Board of Education, made "test" classroom installations of various lighting units. On the basis of these tests, he chose the Wakefield **COMMODORE** for lighting the library, cafeterias and academic classrooms in the new school.

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Thanks to its 18-ounce shade, molded from Plaskon, the Commodore is easier and safer to handle and clean; breakage is less; and factors of safety in other parts of the fixture are greater. Users tell us that the Commodore's cheery light and clean-cut design also encourage cleanliness and respect for school property.

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children in the primary grades be examined at least once a year with a nasopharyngoscope. Those with hyperplastic lymphoid tissue in and around the orifice of the eustachian tubes should be treated with radiation to ensure normal functioning of the tubes.

Undulant Fever Outbreak

Antiquated plumbing and a defective sterilizer are blamed by Michigan state health department investigators for a mysterious outbreak of undulant fever on the Michigan State College campus at Lansing. There have been some 50 cases of the disease and one death. Authorities found that contaminated water from the basement laboratory of Dr. I. F. Huddleson, world authority on undulant or Malta fever, had been transmitted through faulty

plumbing to the water supply of the entire bacteriology building.

VISUAL EDUCATION

Lists 2800 Sound Films

Bell & Howell Company, 1801 Larchmont Avenue, Chicago, has recently issued a Filmosound Library Book listing more than 2800 reels of sound films offered for rental or sale by that company. There is also much material on the method of booking and servicing film prints, on the varied application of listed films to subject matter fields and criteria for the strict appraisal of all offerings. A copy of the book is sent free to every owner of a 16 mm. sound projector registered in the files.

CURRENT FILMS IN REVIEW

THE RIVER: U. S. Government Documentary Film. Soon to be released for school use on 16 mm. sound film.

- Rating: 1. Age level: Secondary school and upward
2. Quality of photography: Excellent
3. Selection of scenes: Excellent
4. Sound track: Narration excellent in both content and delivery; musical background most effective

This is a documentary film produced for the U. S. Department of Agriculture by Pare Lorentz, who also produced "The Plow That Broke the Plains." The tragic biography of the Mississippi River unfolds in sequences of brilliant photography. Opening scenes stress the origins of the river and its tributaries. It is a story of heedless exploitation of the great valley, of wasteful development unguided by foresight of ultimate results.

After the serious situation is presented, there is a change of tempo. If man has taken the valley apart, he also may put it back together again. Regional planning is proposed as one attack upon a problem of this magnitude. The efforts of the T.V.A. are to this end.

The film may be used to great advantage in either social studies or science classes. It develops a better understanding of the problems of conservation for intelligent use, proper cropping methods, transportation developments, flood control, long-range planning and the relationship of people to the soil. The film is relatively free from propaganda.

CONSERVATION OF NATURAL RESOURCES: 1 reel, 16 mm. sound on film. For sale. Distributed by Erpi Classroom Films, Inc., 35-11 Thirty-Fifth Avenue, Long Island City, N. Y.

- Rating: 1. Age level: Useful at all levels
2. Quality of photography: Good
3. Selection of scenes: Fair
4. Spoken commentary: Good

Scenes of forest fires, means used to control and prevent these menaces, uses of some of the wood that might have been destroyed in fires and the replanting of forest lands open this film.

Erosion is next presented, showing sketchily how running water gullies unprotected, cultivated land. Perhaps the best sequence is that which deals with the use of dams to prevent floods and control erosion. Plowing the West as a cause of dust storms follows, with some scenes that show the results of dust storms.

The film then takes up oil conservation and ends with a sequence dealing with stream pollution by industrial waste and sewage.

This film attempts to "cover the earth." Though all the scenes are definitely related to conservation, no phase of it is developed adequately to give a sense of comprehension. It may be used as an introduction to the study of conservation or as a suggestive review at the end of such study.—Reviewed by H. EMMETT BROWN and N. ELDRÉD BINGHAM, teachers of science, Lincoln School, Teachers College, Columbia University, also F. T. HOWARD, student in advanced school, Teachers College.

Current Film Guide

Harold Turney, chairman of the department of drama, Los Angeles City College, is editing a motion picture magazine, *Film Guide*, for evaluation of selected current films by motion picture study groups. The publication will appear regularly except during July and August. Each issue will deal with a film selected by an advisory council of educational and civic leaders and subscribers to the publication.

New Film Catalog

"Free Films for Schools" is a new publication on educational motion pictures issued by the De Vry Corporation, 1111 Armitage Avenue, Chicago. It lists alphabetically 1400 free films from more than 300 sources. Cross references under 60 headings show at a glance what films are available for school projects. Physical data on each film are recorded. The book also gives addresses of sponsors or distributors of each film; a small charge is made for it.

RADIO

For the School Board

On March 15 the U. S. Office of Education will sponsor a special broadcast dedicated to American school board members. This broadcast will be heard over the N.B.C. Blue network at 9:30 p.m. (E.S.T.). Its purpose is to promote closer cooperation between the 127,000 school boards in the United States and the communities that they serve.

The program is a part of the dramatic series, "Wings for the Martins," which is sponsored jointly by the U. S. Office of Education, the National Congress of Parents and Teachers and the National Broadcasting Company. The Martins are a typical family that lives in the next block, beset by the everyday problems of living. The program is designed to show some of modern education's answers to personal and social problems.

This dramatization, which is directed at school boards, is entitled, "What's the School Board For?"

Affiliation With N. Y. C. Schools

As the result of an agreement between the New York City board of education and the Columbia Broadcasting System, the Thursday programs in the "American School of the Air" series originate in the auditoriums of different New York City high schools each week, with a group of pupils participating in the forum discussions that follow the dramatized portions of the broadcast.

(Continued on page 84)

WE AGREE, MR. MOEHLMAN.

Existing buildings may be greatly improved. The first step is to make a sanitary survey of requirements to bring these buildings to modern standards both through renovation and enlargement. The cost of these changes may be easily ascertained. It is then possible to plan ahead for several years, including in each annual budget as much money as possible to improve the worst conditions. If an orderly procedure is planned, it will be possible within a five year period to bring urban school sanitation to a high efficiency.

The practice of hygiene is as essential as the teaching of hygiene. Teaching with the neglect of practice is an inefficient procedure, representing possible waste of money. We recommend school washrooms as an area for serious consideration to those engaged in curriculum revision.

ARTHUR B. MOEHLMAN

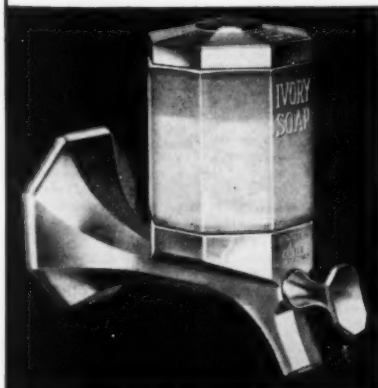
Vol. 23, No. 1, January 1939

From an editorial in the January, 1939, issue of *The Nation's Schools*.

AND we believe school authorities, too, will agree that "the practice of hygiene is as essential as the teaching of hygiene." Certainly greater attention is being given today to school washrooms—both in the planning of new schools and in the modernization of existing schools.

More and more schools are finding that pupils "practice what you teach" when Ivory Soap Dispensers are available. Yes, these modern, attractive dispensers make the task of washing faces and hands pleasanter, more sanitary than is possible with old-style facilities.

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On the Air During March

The following programs of particular interest to school people are arranged by the Columbia Broadcasting System and the National Broadcasting Company. All programs are listed in Eastern Standard Time. Watch listings for your local outlets.

Daily

12:30-1:15 p.m.—National Farm and Home Hour (NBC Blue).¹

Sunday

10:30-11:00 a.m.—Music and American Youth, programs given by public school children from cities all over the country (NBC Red).

12:30-1:00 p.m.—University of Chicago Round Table (NBC Red).

1:00-2:00 p.m.—Great Plays, masterpieces of the drama (NBC Blue).

March 5—Patience.
March 12—Camille.
March 19—Cyrano De Bergerac.
March 26—Peter Pan.

2:00-2:30 p.m.—Americans All, Immigrants All, sponsored by the U. S. Office of Education. Dramatization of the contributions which the successive waves of immigrants have brought to the United States, written by Gilbert Seldes (CBS).

3:00-5:00 p.m.—New York Philharmonic Symphony Orchestra, John Barbirolli, conducting (CBS).

4:30-5:00 p.m.—The World Is Yours, dramatic series sponsored by the Smithsonian Institute (NBC Red).

7:00-7:30 p.m.—The Peoples' Platform, dinner guests of Prof. Lyman Bryson of Columbia University from all walks of life talk over current questions (CBS).

8:00-9:00 p.m.—This Is New York (CBS).

10:30-11:00 p.m.—Headlines and Bylines. Comments on world affairs by H. V. Kaltenborn, Ralph Edwards (CBS).

Monday

2:00-2:30 p.m.—Adventure in Reading (NBC Blue).

2:30-3:00 p.m.—American School of the Air, "Frontiers of Democracy," vocational guidance. A series of programs based on the report of the National Resources Committee dealing with trends in industry and population (CBS).

3:00-3:45 p.m.—Rochester Civic Orchestra (NBC Blue).

5:45-6:00 p.m.—"New Horizons," sponsored by the American Museum of Natural History (CBS).

6:00-6:15 p.m.—Science in the News (NBC Red).

7:45-8:00 p.m.—Science on the March (NBC Blue).

10:30-11:00 p.m.—National Radio Forum (NBC Blue).

Tuesday

12:45-1:15 p.m.—Music Makers, conducted by Dr. Joseph E. Maddy, Elementary, 12:45-1:00 p.m.; advanced, 1:00-1:15 p.m. (NBC Red).

1:30-1:45 p.m.—General Federation of Women's Clubs, consumers' program (NBC Red).

2:00-2:30 p.m.—Science Everywhere, Junior science, Elementary, 2:00-2:15 p.m.; advanced, 2:15-2:30 p.m. (NBC Blue).

2:30-3:00 p.m.—American School of the Air, "Music and Its Friendly Arts." Columbia's Symphony Orchestra and noted commentators in a musical series correlating music with the dance, poetry and prose, drama, opera and architecture (CBS).

Wednesday

2:00-2:30 p.m.—Your Health, sponsored by the American Medical Association (NBC Blue).²

COMMUNITY HEALTH

March 8—Water, Waste and Sanitation.
March 15—Guarding Fresh Foods.
March 22—Auditing the Health Record.
March 29—Animal Diseases Transmitted to Man.

2:30-3:00 p.m.—American School of the Air, "New Horizons," science and geography. Roy Chapman Andrews, director, American Museum of Natural History, and other noted explorers in talks and dramatizations of scientific and geographic expeditions (CBS).

4:00-4:15 p.m.—Of Men and Books, review comments by Prof. John T. Frederick, Northwestern University.

5:15-5:30 p.m.—So You Want to Be—Possible careers for high school pupils (CBS).

5:45-6:00 p.m.—Exploring Space, sponsored by the American Museum of Natural History (CBS).

6:00-6:15 p.m.—Our American Schools, dramatizations tracing growth and development of the nation's school system, Belmont Farley, narrator (NBC Red).

6:30-6:45 p.m.—Music Is My Hobby (NBC Red).

9:30-10:00 p.m.—Wings for the Martins. What modern education has to say on the problems of children and youth in "finding their wings." Sponsored by the U. S. Office of Education and the National Congress of Parents and Teachers (NBC Blue).

Thursday

2:30-3:00 p.m.—American School of the Air, "This Living World" (CBS).

6:00-6:15 p.m.—Operalogue broadcasts of the Metropolitan Opera Guild, designed to aid radio audiences in enjoying opera broadcasts (NBC Red).

8:30-9:15 p.m.—Eastman School of Music Orchestra under the direction of Dr. Howard Hanson and Paul White will be heard on March 9, 23 and 30, April 6, 20 and 27 (NBC Blue).

9:30-10:30 p.m.—America's Town Meeting of the Air, George V. Denny Jr., moderator (NBC Blue).

10:00-10:30 p.m.—Columbia Workshop, experiments in drama (CBS).

10:30-11:00 p.m.—Americans at Work, interviews with workers in representative jobs. CBS adult education series.

Friday

2:00-3:00 p.m.—Walter Damrosch Music Appreciation Hour (NBC Blue).

2:30-3:00 p.m.—American School of the Air, "Tales From Far and Near," literature. Narration and dramatization of modern children's stories, with guest authors (CBS).

10:45-11:00 p.m.—American Viewpoints program (CBS).

Saturday

10:30-10:45 a.m.—Florence Hale's talks, directed to parents, explaining methods of classroom procedure so that education may continue at home as well as in school (NBC Red).

10:45-11:00 a.m.—The Child Grows Up (NBC Blue).

11:00-12:00 noon—Cincinnati Conservatory of Music. New York Philharmonic Children's Concert alternates on third Saturday of each month (CBS).

11:00-11:30 a.m.—No School Today, a new safety program for children (NBC Red).

11:30 a.m.—12:00 noon—Milestones in the History of Music, Eastman School of Music program (NBC Red).

12:00 noon-12:25 p.m.—American Education Forum. Conducted by Dr. Grayson Kefauver, professor of education, Stanford University (NBC Blue).

12:00-12:30 p.m.—NBC Music Guild (NBC Red).

1:15-5:00 p.m.—Metropolitan Opera (NBC Red).

5:00-5:30 p.m.—"What Price America," U. S. Department of Interior program presenting the fight to regain natural resources in dramatized form (CBS).

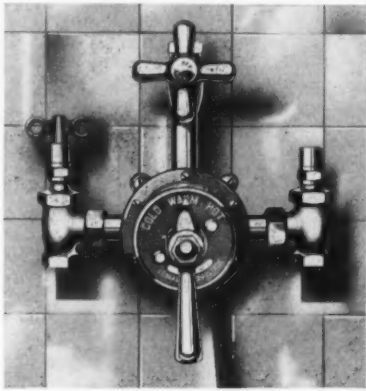
7:30-7:45 p.m.—Lives of Great Men, Dr. Edward Howard Griggs (NBC Red).

8:30-9:00 p.m.—Original Plays (NBC Red).

10:00-11:30 p.m.—NBC Symphony Orchestra under direction of Arturo Toscanini (NBC Blue).

¹Except Sunday.

²Owing to program conflicts, there will be no Chicago broadcast of the network program. Instead, a recording of the program will be broadcast over Station WENR at 8 p.m. each Wednesday.



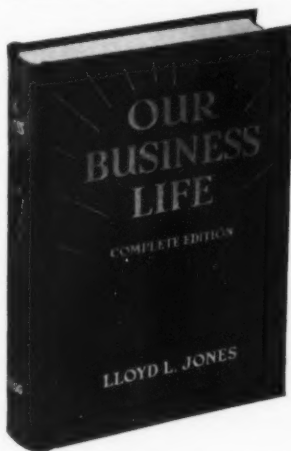
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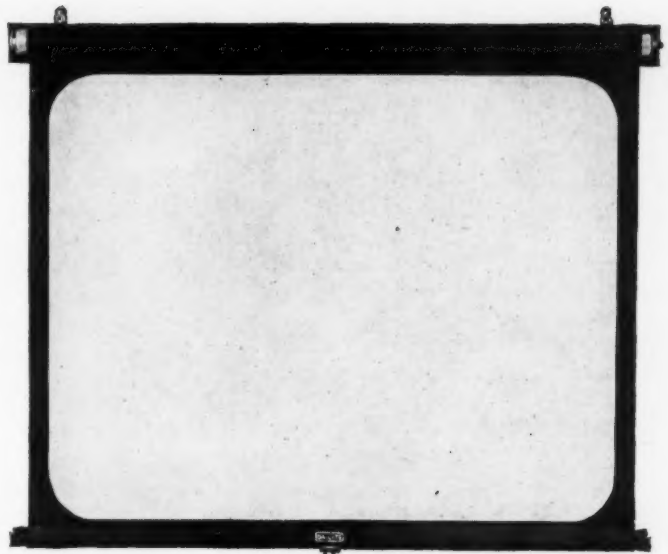
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(Continued from page 81)

The Thursday feature is entitled "This Living World" and consists of dramatizations of current events and their backgrounds. C.B.S. each week installs a complete broadcasting unit in the high school selected and contributes the services of performers and technical staff.

This affiliation between the nation's largest school system and this ten year old educational program was hailed by Mayor LaGuardia and John W. Studebaker, U. S. commissioner of education.

Bismarck Schools Present—

"Sod Shanties and Saddles" is the title of a new series of historical radio sketches being sponsored by the schools of Bismarck, N. D., in which a cast of high school pupils present fifteen minute scripts that have been written by teachers in the Bismarck school system. The weekly programs depict pioneer days in North Dakota and enact in dramatic form the story of ten settlements that played an important part in the development of North Dakota. The programs are under the direction of Myron H. Anderson, school radio director.

This is the third year the Bismarck schools have been on the air. Their first series, known as "Our Bismarck

Schools," dealt with various phases of modern education. Last year "Stories Out of North Dakota's Past" dramatized various episodes in the growth of the state.

To Exhibit Recordings

The third American exhibition of recordings of educational radio programs will be held at Ohio State University May 1 to 3 as a part of the tenth Institute for Education by Radio.

Entries close March 15 and must have been programs broadcast since March 15, 1938, according to I. Keith Tyler, institute secretary, who is a member of the staff of Ohio State's bureau of educational research.

Programs are classified into two groups: (1) for networks, national organizations and clear channel stations and (2) for local and regional stations and organizations.

The competition is open to programs for general use and for school use. In the former classification are the following: (1) lecture, talk, speech; (2) demonstration or participation program; (3) dialogue, round table conversation, interview, debate, question and answer, and (4) all forms of dramatization. School use programs fall into three groups: (1) primary children; (2) elementary children, and (3) junior and

senior high school pupils. First awards and honorable mentions will be given in the seven classes of the two major groups as listed.

ABC's of Radio

The National Association of Broadcasters has issued a new booklet, "The A B C of Radio," so that the average listener may know his ABC's about the American system of radio. The purpose of the booklet is explained thus by Neville Miller, president of the association, in the foreword: "Radio broadcasting in its brief seventeen years has grown to become something more than a piece of precision machinery, something more than a handsome piece of furniture. Radio has become an intimate member of our family. We should know more about it. That is the purpose of this booklet."

High School Radio Contest

Kentucky high schools have been invited to participate in the second annual radio play contest sponsored by the University of Kentucky High School at Lexington. Dramatic groups of participating high schools will go to Lexington at weekly intervals and will broadcast a fifteen minute play of their own choice over a local radio station. The groups will be coached in radio

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technic by the university's radio staff before going on the air. Judges will consist of staff members of the university who will hear the groups in their own homes and will not see the participants.

Substitute Radio for Classroom

A proposal to appropriate \$50,000 for the study of a plan to substitute radio instruction for classroom instruction of children in the five lower grades of elementary schools has been introduced into the Utah state senate. Sponsors of the bill believe radio education would reduce teaching costs, protect children from hazards of travel and from exposure to disease and would provide uniformity of instruction.

MEETINGS

N.A.P.S.B.O. Regional Meet

A regional meeting of the National Association of Public School Business Officials held recently in Memphis, Tenn., brought an attendance of between 60 and 65 from that state as well as Mississippi, Alabama, Missouri and Arkansas. The purpose of the meeting, according to H. C. Roberts, president, was to promote better school administration throughout that section.

Coming Meetings

March 22-24—South Carolina Education Association, Columbia.
 March 22-24—Mississippi Education Association, Jackson.
 March 23-25—Alabama Education Association, Montgomery.
 March 23-25—Georgia Education Association, Atlanta.
 March 31-April 1—Representative Assembly, Michigan Education Association, Lansing.
 April 3-6—American Association for Health, Physical Education and Recreation (N.E.A.) San Francisco.
 April 6-8—Tennessee Education Association, Nashville.
 April 8—California Teachers Association, Palace Hotel, San Francisco.
 April 10-14—Association for Childhood Education, Atlanta, Ga.
 April 12-14—National Catholic Educational Association, Washington, D. C.
 April 12-15—Kentucky Education Association, Louisville.
 April 15—Massachusetts Teachers Federation, Boston.
 May 1-3—Institute for Education by Radio, Ohio State University, Columbus.
 July 2-6—National Education Association, San Francisco.
 July 8-21—Conference on Elementary Education, University of California, Berkeley.
 August 6-11—World Federation of Education Associations, Rio de Janeiro, Brazil.
 Oct. 16-20—National Association of Public School Business Officials, Cincinnati.
 Nov. 30-Dec. 1—National Council of Teachers of English, New York City.

Among those participating in the program were: O. H. Jones, secretary and business manager, Memphis city

schools; R. W. Hibbert, director of supplies and equipment, St. Louis board of education; John W. Lewis, assistant superintendent in charge of business, Baltimore; H. S. Mitchell, business manager, Dearborn, Mich.; Ernest C. Ball, superintendent of schools, Memphis; John Cate, school business manager, Glendale, Calif., and R. S. Shafer, public school business manager at Cincinnati.

Elementary Conference

The Department of Elementary School Principals of the N.E.A. and the school of education of the University of California at Berkeley are cooperating in conducting the third annual Conference on Elementary Education to be held at Berkeley from July 8 to 21. The conference will be under the general direction of Dr. George C. Kyte, supervising principal of the University Elementary School.

For Pan American Education

The Lima Conference paused during its recent deliberations to pass a resolution on behalf of the eighth biennial congress of the World Federation of Education Associations, which will meet in Rio de Janeiro August 6 to 11. It recommended that the conference be brought to the attention of educators

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in the American states and that the delegates be encouraged to visit educational institutions in other countries en route to the conference.

The *Rotterdam* will sail from New York on July 5 and from New Orleans on July 10 to take North American educators to the conference.

It has been announced that three college extension courses, offering credit, will be offered on board the *Rotterdam* as it is en route to South

America. Clark University is offering two geography courses: one of South America and the other of Carribean America. Indiana University will offer a course in comparative education under the direction of Dean Henry Lester Smith of the school of education.

Southern Institute

The Southern Institute of Education will meet in New Orleans at the McMain High School auditorium, March

10 to 11. Speakers who will appear on the two day program include Dr. William F. Russell and Dr. Thomas H. Briggs, both of Teachers College, Columbia University, and Dr. Lynn A. Emerson, professor of industrial education, Cornell University. The institute is sponsored by five local educational agencies.

Eastern Arts Conference

More than 2000 supervisors, directors and teachers of art are expected to attend the thirtieth annual convention of the Eastern Arts Association at the Hotel Pennsylvania in New York City, April 19 to 22.

Exhibits of school art work will be on display, as well as professional art school exhibits and displays of materials and equipment.

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RESEARCH

Social Science Experiments

School children exhibit striking differences in behavior under conditions of democracy and autocratic dictatorship, measurements in social science experiments at the University of Iowa child psychology laboratories have revealed.

Under conditions of autocratic dictatorship, children were less cooperative, less matter-of-fact, more hostile to one another and more submissive to their superiors than were children under democratic conditions.

These findings are reported in the *Harvard Educational Review* by Dr. Kurt Lewin, visiting lecturer at the Harvard graduate school of education and professor of child psychology, University of Iowa.

Upon transfer from an autocratic to a democratic social condition, a child's behavior changes markedly, becoming far less dominating and more friendly and objective.

In the experiments cited by Doctor Lewin, two small "clubs" of boys and girls, about 10 years of age, equal in intelligence and leadership qualities, were put to work making masks. The democratic group settled all policies by cooperative discussion, was assisted by general explanations from the leader, allowed the individuals freedom to work with whomever they pleased and had a leader who attempted to be a group member in spirit and discussion. In the autocratic group, the leader determined all policy, dictated technics one step at a time, determined the work groups and division of labor and criticized and praised the activities without giving reasons.

"There have been few experiences for me as impressive as seeing the expression in children's faces change dur-

ing the first day of 'autocracy," Doctor Lewin said. "The friendly, open and cooperative group, full of life, became within a short half hour a rather apathetic looking gathering without initiative.

"The change from autocracy to democracy seemed to take more time than from democracy to autocracy. Autocracy is imposed upon the individual. Democracy, he has to learn."

ADMINISTRATION

Query on Book Rate

A questionnaire upon the effect of the reduced postal rate on books has been sent a large number of school superintendents and libraries by the U. S. Commissioner of Education, looking toward the continuance of the 1½ cent per pound rate after June 30, when the trial period will expire. At the request of President Roosevelt, Commissioner Studebaker has undertaken a study of the effect of the executive order that went into effect last November. The data supplied should aid in measuring the savings in the book budget through lessened carriage charges. Economies effected in the latter item usually mean more money for the purchase of books.

Informing the School Board

A plan for keeping school board members informed relative to the teaching personnel has been started by Supt. W. J. Edgar at Stanley, Iowa, according to the bulletin of the Iowa state department of education. On a mimeographed form Superintendent Edgar assembles 14 items of information regarding the teacher, including such points as summer school attendance, number of years' experience, years of college training, kind of certificate and salary received.

There is ample space provided at the bottom of the report for the superintendent's rating on the teacher with reference to scholarship, discipline, cooperation and skill in teaching; also for recommendations of the superintendent. A separate report is prepared for each teacher in sufficient quantity to supply each board member with individual copies.

Confirmation Controversy

Five candidates, two women and three men, have been selected by the New York City board of school superintendents to fill five vacancies in the superintendent division. These positions, carrying tenure, pay \$10,000 annually.

Before the five candidates are officially approved, they will be voted

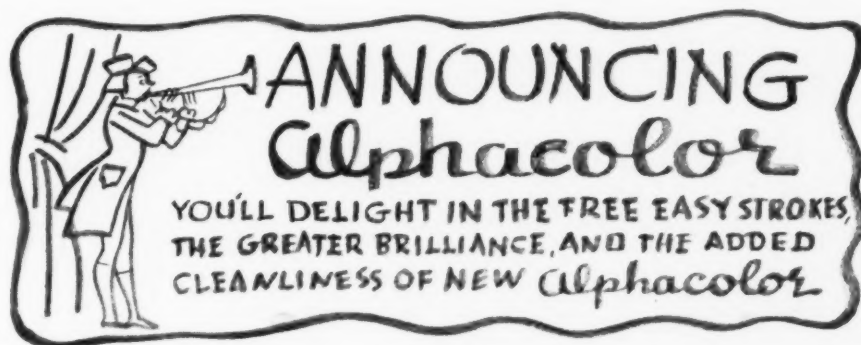
upon by the board of education. They also will be called before the board's instructional affairs committee. If the board wishes, it can reject the names.

This is the first time in the history of the school system that so large a number of assistant superintendents has been chosen at one time. Because these positions are considered of major importance in the system, the method of selecting the candidates has caused a prolonged controversy. Members of the board of education objected to being

"rubber stamps" to the choice of the board of superintendents and demanded a voice in the selection.

The board of superintendents then formulated eligibility requirements, including, for the first time, a personal inspection of the candidate's record by a committee of assistant superintendents. This sifting process has been going on since last fall, and the original list of 75 applicants has been growing gradually smaller.

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cation, its members were invited to attend the interview phase of the examination. During February the remaining candidates were called to board of education headquarters and there, in the presence of members of the two boards, underwent a series of interview tests, oral tests and personal supervisory examinations.

All of the nominees are elementary or junior high school principals. Those nominated are: Minnie Obermeier, principal of the Andrew S. Draper Junior High School; A. Eugenie Chin-nock, principal of the Harriet Beecher Stowe Junior High School; Rufus M. Hartill, principal of Public School 5; C. Frederick Pertsch, principal of John M. Harrigan Junior High School; Thomas H. Hughes, principal of Crescent Junior High School.

Schools Big Election Issue

As the mayoralty primaries draw near in Chicago, the school issue continues to be the most hotly debated subject of the campaign, with candidates in both the Democratic and Republican camps charging the Chicago system is suffering from control through city hall politics.

Last month local citizens were surprised when Prof. James Weber Linn of the University of Chicago, chairman

of the education committee in the Illinois house of representatives, in a radio talk announced he would support Mayor Edward J. Kelly for reelection. Professor Linn has been one of the severest critics of the Chicago school system under Mayor Kelly's administration.

A few days later the mayor announced appointment of seven prominent Chicagoans to a citizens' advisory committee to exercise supervision over appointments to the Chicago board of education. The plan was suggested to the mayor by Professor Linn. The mayor announced that the committee "will exercise constant surveillance over the schools, including budgetary supervision, curricular planning and development of building and legislative recommendations."

INSTRUCTION

Sight-Saving Courses

The National Society for the Prevention of Blindness is cooperating with five colleges and universities in offering at their 1939 summer sessions courses for the preparation of teachers and supervisors of sight-saving classes.

1. Western Reserve University, Cleveland, June 19 to July 28. Olive S. Peck,

supervisor, Braille and sight-saving classes, Cleveland board of education, director.

2. State Teachers College, Buffalo, N. Y., June 26 to August 4 (dates tentative). Agnes Reuter, department of special education, Buffalo public schools, director.

3. State Teachers College, Milwaukee, June 26 to August 4. Marguerite L. Kastrup, supervisor of Braille and sight-saving classes for northern Ohio, Cleveland, director.

4. University of Southern California, Los Angeles, June 26 to August 4. Frances Blend, principal of sight-saving classes, Los Angeles city schools.

5. Wayne University, Detroit, June 26 to August 4 (elementary and advanced courses). Director of the elementary course: Mrs. Gladys Dunlop Matlock, Detroit. Director of the advanced course: Mrs. Winifred Hathaway, associate director, National Society for the Prevention of Blindness.

Music Clinics

A series of orchestra and band "clinics" for South Carolina high schools will be conducted in twelve state centers during March with Lee M. Lockhart, authority on school music, in charge. The sponsors of the clinics are the University of South Carolina ex-

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tension division, the state department of education, the state education association and the South Carolina Public School Music Teachers. In each instance the program will consist of demonstrations, using local high school music organizations, and lectures on the importance of piano instruction in public schools, the administration of piano classes, economical administration of the music program, instruments of the orchestra, vitalizing the music program and how to organize and teach a beginning band.

Dramatizing Poetry

The old method of teaching poetry "by rote" is being replaced by a new participation method, poetry-drama, first introduced through the radio.

With New York City high schools putting on an intensive drive for better speech, study and appreciation of poetry have gained new impetus. At least half a dozen of the high schools are pioneering in the poetry-drama method of teaching.

Instead of unfeelingly memorizing the poem, pupils in these six schools dramatize the selection and participate in its enactment.

"Poetry is returning to the almost forgotten art of counterpoint reading at which the ancient Greeks excelled," says Sinclair Wilson, principal of Stuyvesant High School, New York.

NAMES IN NEWS

Superintendents

DR. PHILIP H. FALK resigned the presidency of Central State Teachers College, Stevens Point, Wis., to become superintendent of schools at Madison, Wis., on January 30. Doctor Falk, who became president of the Stevens Point school last July, succeeding PRESIDENT FRANK S. HYER, retired, has succeeded R. W. BARDWELL at Madison. Mr. Bardwell left the Madison schools to join the staff of a school textbook publisher.

TRACY E. DALE has been named superintendent of schools at St. Joseph, Mo., for a two year term, beginning March 15. He succeeds I. E. STUTSMAN, who resigned to become superintendent at San Antonio, Tex. GEORGE BLACKWELL, principal of Roosevelt Junior High School, St. Joseph, was named secretary and business manager to succeed Mr. Dale.

CHARLES H. PLACE, formerly superintendent of schools, Otoe County, Nebraska, has been named superintendent of schools at Union Center, Neb., to succeed H. W. MUNSON, who has assumed his new duties as superintendent

of schools, Gage County, Nebraska. Before his election as Otoe County superintendent, Mr. Place was principal of the Nebraska City Junior High School, Nebraska City.

JOE R. HUMPHREY of Olney, Tex., was elected superintendent of schools at Temple, Tex., recently for a two year period.

J. EDWARD SMITH, former superintendent of schools in District 2, Berne, Albany County, New York, has been elected superintendent of District 1,

Sidney, Delaware County, New York.

HENRY KOLKA, for the last ten years principal of the high school at Oxford, Wis., has been named to succeed L. W. AMBORN as superintendent of schools, Muscoda, Wis.

ANGELA M. CYLKOWSKI, principal of the McCormick Elementary School, Chicago, was named a district superintendent of schools in Chicago recently succeeding JOHN A. BARTKY, who was chosen president of the Chicago Teachers College last year.

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JEFF E. SAMFORD, superintendent of schools, Shelby County, Texas, for four years, has been elected superintendent of schools at Hempstead, Tex. He succeeds JACK DEVINEY.

FREDERICK R. DARLING, superintendent at Dunkirk, N. Y., for twenty-three years, has resigned. His forty-four year career as an educator will come to an end on July 31, when his resignation becomes effective.

HARRY C. SMITH, superintendent of schools, Sandusky, Ohio, was given another year's contract for the 1939 school year recently.

MONROE BALL, superintendent of the Mendenhall Consolidated School System, Mendenhall, Miss., has resigned to enter the race for county superintendent of education in Simpson County, Mississippi, this summer. His successor is OWEN L. GARRETT, superintendent at Harrisville, Miss.

REES H. HUGHES was recently re-elected superintendent of schools at Parsons, Kan., for another two year term. He has been superintendent at Parsons for eighteen years.

GRANT D. MORSE has been reelected superintendent of schools at Saugerties, N. Y. He has been head of the school system at Saugerties since 1927.

L. H. PETIT has been rehired for a term of two years as administrative

head of the school system at Chanute, Kan.

County Superintendents

VIRGIL B. MOFFETT has been elected superintendent of schools, Ashland County, Ohio, effective August 1. He will succeed O. H. MAFFET, superintendent for more than sixteen years.

C. L. HARKINS, superintendent of schools, Yuma County, Arizona, was recently appointed a member of the Arizona state board of education.

NATHAN L. HONEYCUTT was elected superintendent of schools, Morgan County, Tennessee, succeeding LOUIS R. SCHUBERT, who resigned to become assistant commissioner in the Tennessee state department of education.

State Departments

WALTER F. DOWNEY, headmaster of English High School, Boston, was sworn in as Massachusetts state commissioner of education in late January. His appointment to this post was confirmed by the executive council a short time after JAMES G. REARDON was removed from the office.

JESSIE PARKER, new state superintendent of public instruction for Iowa, has as assistants in the department, J. P. STREET, deputy superintendent;

W. A. WINTERSTEIN, statistician; PAUL B. NORRIS, supervisor of rural schools, and RUSSELL E. JONAS, supervisor of public junior colleges.

MRS. INEZ JOHNSON LEWIS was sworn into office as superintendent of public instruction in Colorado for the fourth time in January. Mrs. Lewis was first elected to her office in 1930.

Deaths

DR. THOMAS STONE MARCH, superintendent of schools at Greensburg, Pa., died January 13 at the age of 71 years. He formerly was state inspector of schools in the department of education.

SILAS H. BROWN, 63, who would have been retired in June as supervising principal of schools at Womelsdorf, Pa., collapsed at the entrance of the Womelsdorf High School. His death, which followed shortly, was attributed to heart attack.

ROBERT J. BINGHAM, 48, superintendent of schools, Rio Hondo, Tex., died suddenly of a heart attack.

PATRICK H. KENNEDY, principal of Lincoln School, Simpson, Pa., died following a two weeks' illness.

GEORGE E. GANIARD, superintendent of schools, Mount Pleasant, Mich., died recently.

GEORGE M. SNODGRASS, president of La Crosse State Teachers College, La

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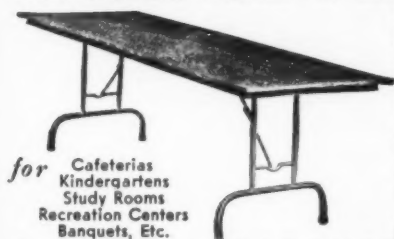
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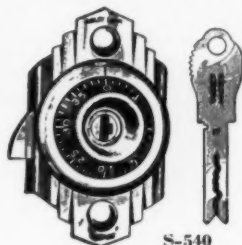


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Crosse, Wis., for eleven years, died recently of pneumonia at the age of 59 years.

FRANK W. JACKSON, superintendent of schools for Ossipee, Effingham, Tamworth, Madison, Freedom and Wakefield, N. H., recently died of heart disease. He was 64 years of age.

HOMER T. BAGENSTOSE, principal of the Mahanoy City High School, Mahanoy City, Pa., died recently at the age of 63 years.

Principals

JAMES FLOYD KIRK, a teacher in the Cloverdale Junior High School, Montgomery, Ala., has become principal of the Catoma Junior High School, Montgomery, succeeding T. C. CARLTON, who has joined the faculty of the Sidney Lanier High School, Montgomery.

L. E. LEIPOLD, a teacher at West High School, Minneapolis, has been appointed principal of the Adams School, Minneapolis. EDWIN C. CULBERT has been advanced to the principalship of Sanford High School, Minneapolis.

FRANK G. BRUNER, principal of Englewood High School, Chicago, will retire this month under the compulsory retirement law.

BENTON MANLEY, who will be officially named principal of the new Will

Rogers High School at Tulsa, Okla., upon its completion, will be succeeded at Horace Mann High School, his present principalship, by O. C. GRIGGS, principal of Whittier School, Tulsa.

RALPH F. EVANS, principal of the Niantic Community High School, Decatur, Ill., has been granted a leave of absence for graduate study at the University of Iowa.

RICHARD S. POLLACK, a member of the faculty of the Moorestown High School, Moorestown, N. J., was recently named supervising principal of the Lower Camden County Regional High School, Camden, N. J.

GRANVILLE KNOX, principal of the high school at Bertram, Tex., has resigned.

E. FRANCIS BOWDITCH, assistant dean of freshmen at Harvard University, has been appointed headmaster of Park School, Indianapolis. He will succeed C. O. PAGE, who has resigned to become headmaster of Detroit University School at Grosse Pointe, Mich., on July 1. Mr. Bowditch is 26 years old.

HAROLD M. ELSBREE has resigned as principal at Earlville, N. Y., effective at the end of the school year, to accept the principalship of Mexico Academy and Central School, Mexico, N. Y. This school represents a consolidation of 31 districts with the old Mexico

Academy and has a total enrollment of nearly 1000 with 55 teachers. Mr. Elsbree will succeed CHARLES SMITH, who goes to Syracuse University to complete study for the doctor's degree. VICE PRINCIPAL ALLAN P. BRADLEY was advanced to the principalship at Earlville succeeding Mr. Elsbree.

BURT P. JOHNSON, principal of the Goldsboro High School, Goldsboro, N. C., since 1934, has accepted a position as principal of the high school at Port Jervis, N. Y. Mr. Johnson began his work at Port Jervis on February 18.

WILLIAM P. VON LEVERIN, principal at Lincoln Junior High School, Minneapolis, has been named principal of Roosevelt High School, Minneapolis. Named principal at Lincoln was HARRY A. GARRISON.

LEMUEL F. GAMES, assistant principal of Maury High School, Norfolk, Va., since 1926, has been elected principal of the new junior-senior high school now under construction at Norfolk.

WALLACE BREY, former principal at Washington and Schwenksville, Pa., was appointed principal of the new Tredyffrin-Easttown Junior High School, Westchester, Pa., recently.

LAWRENCE B. WHITE, director of adult and continuous education at Alhambra High School, Alhambra, Calif.,



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has been appointed principal of the Mark Keppel High School at Alhambra.

HENRY E. GALLOWAY, supervising principal of Poland Central School, Poland, N. Y., has been engaged to take over the principalship of the Morrisville-Eaton Central School District, Morrisville, N. Y.

JOSEPH C. THOMPSON, principal of the evening school of Crane Technical High School, Chicago, was appointed principal of the evening school opened at Washburne Trade School on January 30. The school will be the first complete evening vocational school in Chicago, the courses including millinery, sewing, household economics, electricity, printing, plumbing, paper hanging and photo engraving.

WELLINGTON HODGKINS, principal of Van Sickle Junior High School, and ARTHUR P. IRVING, principal of Buckingham Junior High School, both of Springfield, Mass., have announced their retirements. Mr. Irving will retire at the end of the present school year while Mr. Hodgkins will remain until Feb. 1, 1940.

LLOYD SWICK, elementary school teacher at Akron, Ind., has succeeded RUSSELL STOUT as principal of the Jefferson Township High School, north of Goshen, Ind. Mr. Stout has gone to

the high school at Mishawaka, Ind., as social science instructor.

CECIL W. FULLER has been appointed supervising principal of the Seaford School, Freeport, N. Y.

CLARENCE E. BECK has accepted the principalship of the high school at Oolitic, Ind., succeeding FRED ANDERSON, now principal of the high school at Merkelville, Ind.

DR. CHARLES BUFFINGTON FAGER JR., principal of William Penn High School, Harrisburg, Pa., having arrived at the age of retirement, will close a half century of public school work with the end of the present term on June 16.

In the Colleges

DEAN GEORGE H. CHASE of the graduate school of arts and sciences, Harvard University, has been appointed dean of the university, a new position tantamount to deputy president. He will assist PRESIDENT JAMES B. CONANT in exercising a general superintendence over all the concerns of the university, will take the president's place as chairman of various committees and will represent him at conferences within the university.

REV. EVALD B. LAWSON was inducted February 6 as the fourth president of Upsala College, East Orange, N. J.

DR. JOSEPH H. EDGE was inaugu-

rated as president of Dakota Wesleyan University, Mitchell, S. D., on February 1.

DR. J. RUSKIN HOWE, professor of theology at Bonebrake Seminary, Dayton, Ohio, has been appointed president of Otterbein College at Westerville, Ohio, succeeding DR. WALTER G. CLIPPINGER. He will assume his new duties next fall.

PRESIDENT GEORGE NORLIN of the University of Colorado has announced his decision to retire at the end of the present academic year. In a poll of student opinion, conducted by *Silver and Gold*, campus newspaper, 56 per cent of the students favor the choice of a successor from the university faculty.

DR. GUY WIMMER of Bloomington, Ill., has been elected president of Shurtleff College, 121 year old Baptist college at Alton, Ill., succeeding DR. PAUL LAMONT THOMPSON, who resigned last June to accept the presidency of Kalamazoo College at Kalamazoo, Mich.

DR. DANIEL A. PRESCOTT, professor of education at Rutgers University, New Brunswick, N. J., has been appointed professor of education at the University of Chicago. His appointment to the Chicago faculty is said to emphasize the shift in interest of the department of education from studies of technic to the process of learning.

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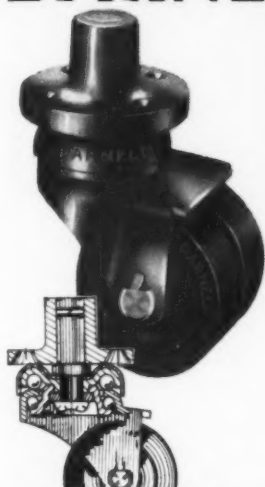
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THE BOOKSHELF

DEMOCRACY AND THE CURRICULUM. *The Life and Program of the American School. Third Yearbook of the John Dewey Society.* By Harold Rugg and Others. New York: D. Appleton-Century Company, 1939. Pp. xiv+536. \$2.75.

An arresting, thought-provoking book that builds up logically to a climax from a broad cultural base. The chief difficulty is that only a small segment of the teaching profession has sufficient background to read it understandingly.

BACKGROUND TO MODERN SCIENCE. Edited by Joseph Needham and Walter Pagel. New York: The Macmillan Company, 1938. Pp. xii+243. \$2. Symposium consisting of ten lectures at Cambridge and arranged by the History of Science Committee. Adapted for college level.

ADULT EDUCATION. By F. W. Reeves, T. Fansler and C. O. Houle. Publication of *The Regents' Inquiry*. New York: McGraw-Hill Book Co., Inc., 1938. Pp. xvi+171. \$2. The problem of providing more in-

telligently and coherently for the continued education of the adult is treated clearly and rationally in this special area publication of the New York State survey.

THE BASQUE PROBLEM. *As Seen by Cardinal Goma and President Aguirre.* By Dr. De Azpilikueta. New York: The Basque Archives, 1938. Pp. 189.

An attempt to clear up many misunderstandings of the Basques as they have been presented through propaganda growing out of the Spanish civil war.

RICHARD HALLIBURTON'S FIRST BOOK OF MARVELS: *The Occident.* School Edition. Indianapolis: The Bobbs-Merrill Co., 1938. Pp. 314. \$0.84.

Excellent illustration makes this production a valuable addition to the school library.

RICHARD HALLIBURTON'S SECOND BOOK OF MARVELS: *The Orient.* School Edition. Indianapolis: The Bobbs-Merrill Co., 1938. Pp. 316. \$0.84.

Architectural and scenic features of the orient are effectively illustrated and

simply treated. Recommended for school libraries.

EDITORIAL TREATMENT OF EDUCATION IN THE AMERICAN PRESS. By Charles R. Foster Jr. *Harvard Bulletin in Education*, No. 21. Cambridge: Harvard University Press, 1938. Pp. xiii+303. \$2. (Paper Cover).

The reflection of popular attitudes toward public education as screened through the daily press. Shows editorial emphasis on extrinsic and human interest factors to the neglect of the central purpose—instruction.

THE BOOK OF ORIGINAL PLAYS AND HOW TO GIVE THEM. By Horace J. Gardner and Bonneviere Arnaud. Philadelphia: J. B. Lippincott Company, 1938. Pp. 414. \$2.50.

An answer to the elementary and secondary school teachers' demand for more and better plays adapted to different age groups.

ILLUSTRATED CATALOGUE OF PUBLICATIONS OF THE NATIONAL COLLECTIONS. New York: The British Library of Information, 1938. Pp. x+81. \$0.35 (Paper Cover).

In an attempt to make national art and the museum collections more readily available to schools and to the public, this annotated and illustrated catalog has been prepared especially for the use of educational institutions.

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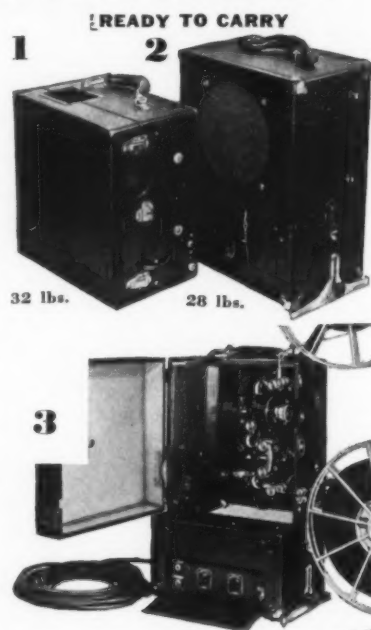
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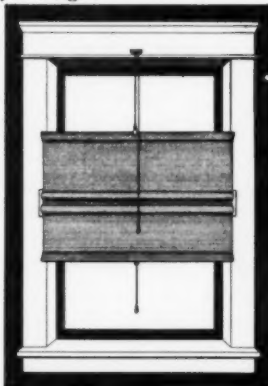


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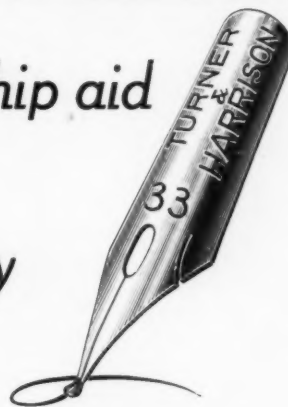


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CRITICAL ISSUES IN EDUCATIONAL ADMINISTRATION. Volume 1. Edited by William C. Reavis. Chicago: The University of Chicago Press, 1938. Pp. viii+192. Lithoprinted. \$2. (Paper Cover).

Proceedings of the seventh annual conference for administrative officers of public and private schools.

MARIHUANA. America's New Drug Problem. By Robert P. Walton. Philadelphia: J. B. Lippincott Company, 1938. Pp. ix+223. \$3.

The unusual dangers of marihuana to American life are presented in an extensive collection of information on this subject. Should be of particular interest to teachers.

VOCATIONAL GUIDANCE IN CATHOLIC SECONDARY SCHOOLS. A Study of Development and Present Status. By Sister M. Teresa Gertrude Murray. Contributions to Education, No. 754. New York: Bureau of Publications, Teachers College, Columbia University, 1938. Pp. viii+163. \$1.60.

Survey of background, attitude and extent, with a diagnosis of reasons for current status.

FINDING WISDOM. Chronicles of a School of Today. By Gertrude Hartman. Illustrated. New York: The John Day Company, 1938. Pp. xviii+147. \$3.

The vivid story of the Avery Coonley progressive school on its twenty-fifth anniversary, with a wealth of explanatory illustration.

AUDITORY AIDS IN THE CLASSROOM. Prepared by John V. L. Hogan and R. M. Wilmotte for the Committee on Scientific Aids to Learning. New York: The Committee, 1938. Pp. 66. Free on Request.

Report for administrators on the cost of providing auditory aids by broadcast, by wire lines and by records.

Just Off the Press

OFFICIAL RECREATIONAL GAMES AND SPORTS GUIDE. Badminton, Track and Field. Edited by Bertie Hammond and Alice C. Schriver. New York: A. S. Barnes and Company, 1938. Pp. 92. \$0.25 (Paper Cover).

OFFICIAL INDIVIDUAL SPORTS GUIDE. Archery-Tennis-Riding-Golf. Edited by Margaret Fitch Newport. New York: A. S. Barnes and Company, 1938. Pp. 95. \$0.25 (Paper Cover).

SHORTSCRIPT: The Art of Rapid Writing. By A. Maerz. New York City: H. L. Lindquist Publications, 1938. Pp. 61. \$2.97.

MATHEMATICAL ADVENTURES. By Fletcher Durell. Boston: Bruce Humphries, Inc., 1938. Pp. 157. \$2.

THE NEW DAY FOR THE INDIANS. A Survey of the Working of the Indian Reorganization Act of 1934. Prepared by Jay B. Nash, Oliver LaFarge and W. Carson Ryan. New York City: Academy Press, (December) 1938. Pp. 47. \$0.10 (Paper Cover).

BY WAY OF INTRODUCTION. A Book List For Young People. Compiled by a Joint Committee of the American Library Association and the National Education Association. Jean Carolyn Roos, Chairman. Chicago: American Library Association, 1938. Pp. 130. \$0.65 (Paper Cover).

ACTIVITY BOOK FOR SCHOOL LIBRARIES. By Lucile F. Fargo. Chicago: American Library Association, 1938. Pp. xi+208. \$2.50.

TEACHER EDUCATION CURRICULUMS. State Teachers Colleges of Pennsylvania Bulletin 153. Harrisburg, Pennsylvania: Department of Public Instruction, 1938. Lester K. Ade, Superintendent. Pp. 54. (Paper Cover.)

THE MACMILLAN HANDBOOK OF ENGLISH. By John M. Kierzek. New York: The Macmillan Company, 1939. Pp. xii+430. \$1.25.

OFFICIAL AQUATIC GUIDE. Official Rules for Intramural, Interscholastic, Intercollegiate and Telegraphic Swimming Meets. Edited by Fran-

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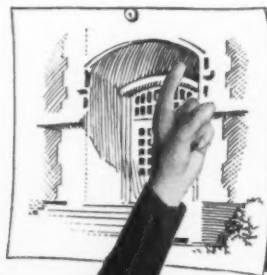
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ces A. Greenwood. New York: A. S. Barnes and Company, 1938. Pp. 71. \$0.25 (Paper Cover).

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The WESTERN ELECTRIC COMPANY, 195 Broadway, New York, inaugurates a new high standard of quality for low cost loud-speakers with the introduction of loud-speaking telephones, 750A and 751A, which are especially recommended for music reproduction systems and radio monitoring. . . . Seven qualifications to be considered in the purchase of flush valves are discussed in the attractive booklet, "Flush Valve Facts," just published by the SLOAN VALVE COMPANY, 4300 West Lake Street, Chicago.

Two new and improved sanding machines, the Speed-O-Lite and the Dustless Disc Sander, which are well adapted to school use, have been announced by LINCOLN-SCHLUETER FLOOR MACHINERY COMPANY, INC., 228 West Grand Avenue (Dept. A), Chicago. . . . The SOUTH BEND LATHE WORKS, South Bend, Ind., has published a 32 page catalog, with more than 150 illustrations, describing the new model 9 inch workshop precision lathe. . . . A slow self-closing measuring combination fixture has been developed by the SPEAKMAN COMPANY, Wilmington, Del., to provide an efficient and economical means of water control for lavatories.

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IN THE country, it's spring cleaning. In the city, it's redecorating. In school buildings, it's summer renovation. Anything you call it, it's a headache.

For school superintendents, business managers and custodians we are compounding a prescription for this perennial migraine. It comes in tablet form and can be taken, as needed, until the symptoms disappear. In a series of experimental cases on which our remedy is being tested, relief comes promptly. Furrows leave the anguished brow and the anxiety state that universally accompanies this summer seizure disappears miraculously. The new therapy will be released for general school use late in April. We refer to the Summer Renovation Portfolio, a feature of the May issue.

FOUR years ago a certain school inaugurated a system of "statement" or "paragraph grades" in place of the old numerical or symbol type of achievement mark. The new plan is a time-consuming process although technics have been worked out to reduce the labor somewhat. The gains seem to offset the extra effort involved.

The pupils find the adjustment to the new type of grades fairly difficult, but the school decided against compromise and made a clean break with tradition. As freshmen the pupils have the system carefully explained to them and after the first grades are out individual conferences help them to adjust themselves to it.

How the plan works and examples of paragraph grades will be given next month by Edwina B. Hogadone, counselor at the Rochester Athenaeum and Mechanics Institute. All those principals and superintendents who write

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this magazine for suggestions about an improved system of marks will want to weigh this plan.

WHAT a contrast between such schools as the one described on page 51 and some of the schools of our youth, village or prairie schools with just a teacher, a bell, a box of chalk, coal and water buckets, and an engraving of George Washington. How we have progressed! Or have we? All too many children are going to school today in the same building or the same type of building their grandparents attended.

Many districts of negligible wealth stand in grave need of buildings they cannot afford to buy. The state shares their costs of operation; with equal justice it can share their costs of building. Or so contends Lee M. Thurston, professor of education, University of Pittsburgh, in an article on state aid for school construction, scheduled for May publication.

THE administrator or teacher who elects to spend his summer holidays at a college or university need not be surprised to recognize, strolling under the campus elms, his own school custodian in Sunday clothes.

For he who once was only a school janitor is now of necessity a trained engineer, else how could he operate all the delicately adjusted equipment of the modern school plant! Temperature, ventilation and lighting controls, radio, telephone and projection installations, these are a few of the newer types of equipment that the custodian-engineer must keep at operating efficiency.

To enable him to master this responsible job, summer courses for custodians are being given on various campuses. Lester B. Robertson of Guernsey, Wyo., will sound the call for custodians' summer schools in May.

SCHOOLS that are planning to install new kitchen and lunchroom equipment will find the help they desire in a description of the cafeteria at the new high school, Norwalk, Conn., to appear in the May issue.

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LOOKING FORWARD

Just Another Fire

THE town of Bellefonte, Pa., was proud of its four story brick school with the boiler plant located within the building envelope. Early one February morning the unexpected happened. There was an unexpected fire in the boiler room. Fires are always unexpected! Smoke filled the ventilating system and quickly filled the classrooms. Only an efficient emergency technic permitted 900 coatless and hatless pupils to gain the safety of the out-of-doors. Soon the structure was a smoldering mass of ruins.

The school authorities deserve commendation for their training of the children to respond to an emergency. To this regular drill, a large number of these pupils probably owe their lives. The major fault, however, lay in the planning of the structure by permitting a boiler room to be built within the school. Here the board of education, the final local judge in these matters, was distinctly at fault.

There are many people, including laymen, architects, engineers and schoolmen, who still believe that boiler room placement within a building is a perfectly safe procedure. The experience and cautious admonitions of the underwriters are blithely ignored. While some states have enacted mandatory statutes that prevent inside placement, the great majority of states are still extremely careless about this problem, permitting local authorities a wide choice.

One frequently hears the argument advanced by so-called "practical" board of education members and by architects who are forced to work within narrow budget limits, that the inside placement of low pressure boilers represents no hazard. They can prove it mathematically! The danger of explosions is low with this type of heating plant, but the danger of fire in coal bunkers or in the boiler room or through some boiler defect is great. Scarcely a month passes without a report of fire from this source.

Child life is too valuable to be exposed needlessly to the dangers of fire originating within a building. Economy should never be carried to the point where it is necessary to ignore fundamental structural safety. Much more careful attention should be paid by superintendents to these hazards. If the executive feels that the board of education is prone to brush aside these sensible warnings and recommendations, all means

should be used to obtain competent outside educational advice either from the state education authority or from university specialists. The weight of expert opinion may be needed to offset the shortsighted economy urges of a board of education.

In general, public school buildings should not be more than two stories high and should be designed on either a two or three hour fire-resistant basis. All heating plants and coal bunkers should be located outside of the building shell. Ventilating systems should never be permitted to use stair wells as air returns. All plans should be open without dead-end corridors. Automatic sprinkling systems should be installed in at least all boiler rooms, laboratories, shops, auditoriums, libraries, studios, homemaking rooms and storage rooms. Fire drills should be carried on until the children are mechanically perfect in their execution. Only through the building of all possible safety devices into our schools can the unnecessary danger to child life be avoided.

Tolerance

DEMOCRACY is based upon respect for personality, recognition of the fact that there is always more than one solution to a problem, fair play, an ability to differ with one's friends and neighbors and yet retain a belief in their honesty, sympathy and charity for the weak and the underdog and a clear-cut recognition of the rights of our fellows as well as an understanding of our own. Democracy is imbued with the belief that improvement in all is possible, provided opportunity is present.

Conversely, democracy does not thrive on neurotic emphasis on the "better than thou" concept, or upon hate, the creation of class, race or religious distinctions, or conscienceless individualism.

Democracy means the acceptance of a nice balance between unrestrained individualism and stultifying socialization, a harmonious relationship between the individual and the group. In terms of ethics it is probably best exemplified by the golden rule and in immediate practice by an attitude of reasonableness or tolerance.

All institutions and individuals must assume responsibility for the development of democratic tolerance. Home, community, church, state and economic organ-

ization cannot avoid this obligation. The home frequently falls short in its democratic teaching because of the reflex of economic fear, narrow sectarianism and social provincialism. The practice of our technological processes in so-called individual enterprise too frequently results in creating a feeling of insecurity and an overpowering fear, which are personified in their reactions to management, to the machine as the symbol of power and to the individuals in competition. Sectarian persuasions, with strong belief in their presumptive superiority over other sectarian expression, tend to create intolerant attitudes toward the beliefs of others. Social competition, conditions and living and economic competition result in a feeling of fear that translates itself easily into racial hate. Differences in cultural patterns and racial beliefs raise a feeling of distrust for those who believe and live differently.

These problems of conflict are not so difficult in homogeneous cultures but the United States represents an unusual social laboratory in which the diverse cultures of the entire globe are gradually being merged into what ultimately will be an integrated American culture. This process has always been difficult even on a small scale. Upon the scale operating in this country it presents unusual difficulties.

In a homogenous democratic culture the public school is engaged in the process of social reproduction and the progressive improvement of the culture. In the United States, in addition to these demands, the public school also has acted since its inception as the harmonizer of cultural conflict, the common ground on which all races, beliefs and economic points of view may meet to learn the lessons of democracy and the great value of tolerance.

The American school is conceptually an impartial, nonpartisan, nonsectarian, classless agency through which all of the children of all of the people may receive instruction in democratic values and processes. It is a common meeting place for the harmonization of those cultural differences which otherwise create social conflict and group cleavage. Upon the whole the public school has done this part of its work well in the past. It is difficult to conceive of how the tremendous and diverse migrations of the last century could have been oriented and integrated as well as they have without the help of this institution. It is one of the outstanding contributions of the public school, but it is seldom given even scant recognition.

There have always been small areas of intolerance in this country. They develop sporadically, flourish for a time and then die. These waves of intolerance have created difficulties for many minority groups including the Negro, the Indian, the Oriental, the Mexican, the Jew and certain minority religious expressions. However, the fundamental tolerance developed in the people to a large extent through the harmonizing influ-

ence of public education has created a deep reservoir of tolerance that laughs at these phobias and cultural neuroses.

The impact of totalitarian philosophies upon this country is again creating islands of intolerance. The myth of racial superiority, psychopathic nationalism, the revival of the "motherland feeling" among sentimentalists of the first generation and the general encouragement of nondemocratic ideas are undoubtedly making headway. The wisdom of enacting legal prohibitions against this sort of propaganda is doubtful. Democracy demands free expression of opinion for all. It cannot afford to be afraid of ideas. Many people also believe that uniformed marching bands and awe-inspiring secrecy are merely a reflex of the adult urge to play Indian. If these propagandas are brought into the open, the American sense of balance will assert itself and its innate humor will laugh them into nothingness as it did the white-sheeted Klan.

There is some evidence that areas of intolerance are beginning to express themselves in the public schools. Here there is absolutely no place for such expressions. The public school must be constantly aware of its harmonizing responsibility and must practice even more zealously its attempt to instill the fundamental principles of democracy in the children under its care. This need is particularly essential in the secondary school where certain evidence of class cleavage is most disturbing. While the school cannot accomplish single-handed what the home, community, church and school should do together, it can provide an area in which intolerance of any sort will not be permitted to operate. Teachers, principals and superintendents should give increasing thought to this problem and see that all curricular areas recognize and teach the fundamental value of tolerance as part of the democratic way of life.

Men Needed

THE public school teaching personnel is approximately 85 per cent female and 15 per cent male. The women logically dominate the elementary school. There is a general belief that they do much better in directing the educational efforts of early childhood than do the men. The same reasoning does not hold true for the secondary school. Yet it is now possible for a boy or girl to spend six years in a high school without being exposed to more than three or four men teachers and then for one or two semesters only. One of the definite needs in the selection and training of personnel is to obtain a sufficiently large proportion of men teachers so that secondary school faculties will be at least equally divided on a sex basis.

Phi Delta Kappa, a professional education fraternity, is therefore to be congratulated upon its leadership in

preparing a worth while monograph entitled "Teaching as a Man's Job" for distribution not only in colleges and universities but also in secondary schools at a time when major vocational choices are being made. If given proper consideration by guidance officials and teachers, this publication should be of value in stimulating the recruiting of capable men as teachers. The public schools certainly need them.

State Employee Taxation

FOR several years we have been advocating the payment of income taxes to the federal government by all state employes, including teachers, built upon the general thesis that it is dangerous to provide tax exemptions for any group in a democratic state. Many commendations were received from all sections of the country, to say nothing of a few condemnations.

The general tenor of objections ran somewhat as follows: The teachers are already poorly paid. The fact of exemption from federal income tax has already been discounted in setting salaries. The removal of this exemption would merely mean that teachers would gradually obtain a sufficient increase in salary to more than overcome the disutility of paying income tax.

Even if this assumption of the objectors is valid, and it might well be over a sufficiently long period of time, the argument for the payment of federal income taxes by teachers is still sound. There should be no tax exemptions. Democracy can afford no favored groups!

On May 23, 1938, the United States Supreme Court broke with older precedents and published the opinion that certain state highway, interstate bridge and port employes are subject to the federal income tax. The attorney general's office has notified the Treasury that all state and municipal employes appear to be subject to this form of taxation under the decision in the New York case. The Treasury Department has as yet made no ruling governing its procedure.

If the Treasury attempted to collect income taxes from all state and municipal employes under current conditions, such employes would be subject to the payment of income taxes on all salaries earned since 1926 or at least since 1935. Such a ruling would be manifestly unfair and would work grave hardships upon the individuals involved.

To avoid this possibility, it is essential that the Congress pass special legislation in which this retroactive feature would be eliminated by statutory means. If the Congress does not pass such limiting legislation and the Treasury acts, all state and municipal employes are bound to suffer.

It, therefore, seems desirable in the interests of fairness that this problem be brought vigorously to the attention of the Congress. President Roosevelt has already made a specific recommendation covering the

same point. Pressures are being brought upon congressmen and senators by interested state and municipal pressure groups to avoid such legislation.

Congressional failure to act does not relieve state and municipal employes from liability. Upon the basis of the 1938 Supreme Court opinion, the Treasury can rule that state and municipal employes shall pay income taxes. Under these circumstances, the Treasury could not prevent them from being made retroactive to 1926.

It seems desirable, therefore, that the teaching profession consider its position thoughtfully and realize the need for clarifying congressional opinion upon this subject. At the present writing a bill has already been passed by the house and has been reported favorably by the senate committee to which it was assigned.

Convention Echoes

THE Cleveland meeting of the American Association of School administrators was a success from many points of view. Attendance was unusually good, the program was well-balanced and the topics were timely. President Sexson's plans offered good opportunity for group participation in the program. Speakers were generally well chosen and program balance in presenting different points of view was noticeable. The only serious weakness was the apparent inability of general session speakers to recognize time limits in the presentation of their papers. The chairmen of these meetings were too easy. As a result, general sessions lagged and ran overtime to the great discouragement of the audience. A rigid time limit for general session speakers seems essential to the further improvement of these meetings.

Allergic to Spelling

A NEIGHBOR with a daughter in a very progressive school told us this one. She wrote home every week and the parents found her letters interesting but comparatively free from any concept of the simple rules of sentence structure and grammatical relations and completely devoid of any knowledge of spelling. The father wrote the headmistress and tactfully pointed out the need for correction of these weaknesses. The replies were beautifully expressed and soul-satisfying, excellent samples of home-school relationships, but no improvement was noted. Finally, somewhat in despair, he wrote to his daughter dwelling gently but firmly upon the need for correction.

The reply came. Said daughter, "Sorry, dad, but I must be allergic to spelling!"

The Editor

Long Range

SELMER H. BERG



This was the basis upon which Rockford planned its future school building program. A survey of the physical expansion and population growth of the city indicated trends.

FREQUENTLY the school plant hinders and delays the development of the educational program because of inadequate and inflexible facilities. Adapting the existing school plant of the average community to meet the needs of even the conservative educational program of today is a considerable problem. Present school sites may

be inadequate, providing no room for expansion, or buildings may be improperly located as a result of a change in type of city development, such as the expansion of a commercial or industrial district into a residential area. Planning for the future plant involves a careful study of the trends in education, population, commercial and industrial development

and city planning. Only a comprehensive study will identify and formulate properly all the essential factors for an adequate long range school building program.

Ten years ago, such a study of school plant needs was developed in Rockford, Ill., under the direction of the superintendent of schools, Dr. Frank A. Jensen.¹ Local personnel from the educational staff and the community assisted in making the study under outside specialist direction.² The program was described as "a community project to secure adequate public school accommodations for the children" of the city.

The findings of the report are organized under the following topics: the city of Rockford, the school population, the educational policies, the present school plant, the ultimate school plant and finance.

¹Now superintendent of the La Salle-Peru Township High School and Junior College, La Salle, Ill.

²Published by the board of education as the Rockford School Plant Program, 1930.



Left: The traffic problem on a busy street near the senior high school. To reach it 3200 pupils must pass through the downtown district daily. Right: A rear view of the present senior high school, showing the environment of factories, coal yards, railroad tracks and total absence of outdoor playgrounds.

School Planning

Superintendent of Schools
Rockford, Ill.

As a background, there is presented a comprehensive description of the general character of the people and activities of the city. Industrial and commercial enterprises are analyzed with respect to type, employment, future growth and location.

The transportation facilities, together with the future commercial and industrial development, provide the basis for future zoning plans. Social conditions with the activities of the many agencies in this field are presented in relationship to the educational problem. The physical expansion and population growth of the city reveal significant trends for the future school building program.

School population as a factor in determining future building needs is traced in relationship to general population growth, public school holding power, nonpublic school growth and gradual extension of educational opportunities. The type of educational program and of organization adopted by the commu-

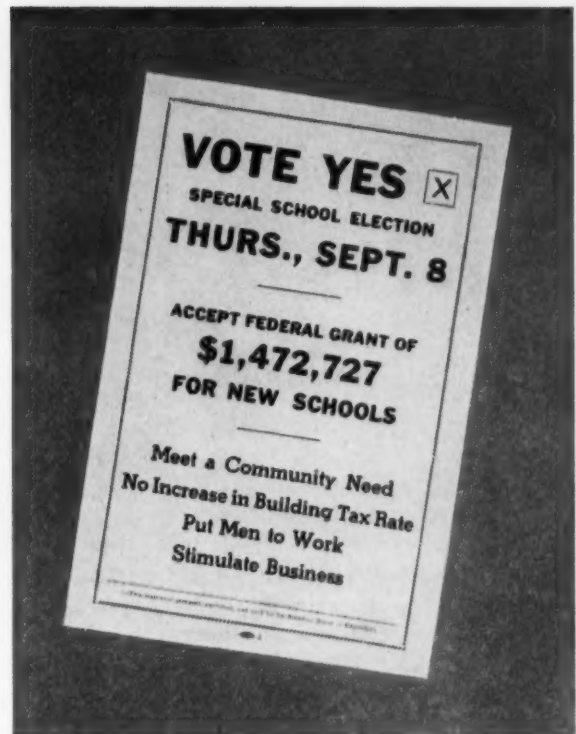
The campaign to authorize a bond issue and to accept a federal grant was strengthened by the long range plan and by educational publicity supplied by the board of education of which this pamphlet is an example.

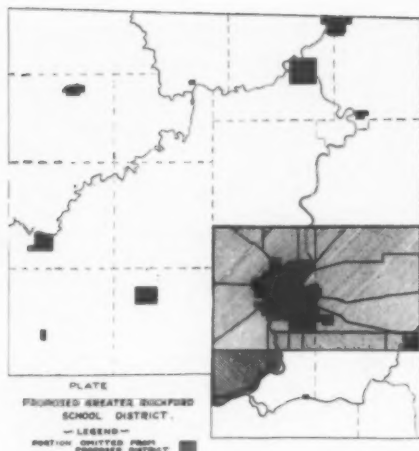
nity becomes the basic determinant in developing the future plant.

The existing school plant appraisal sets forth "(1) the character of the physical plant; (2) the location of the present plant; (3) present use of buildings, and (4) possible future demands." Instructional and mechanical efficiency, condition of construction, flexibility, safety and

evaluation of sites for size, location and suitability constitute the major criteria in formulating recommendations for the future use of the present plant. Some buildings and sites are recommended to be abandoned; others, to be retained and enlarged.

The ultimate or future school plant program emerges from the study in 1930, as the outgrowth of the several





conditioning factors, namely, "(1) educational policies; (2) the extent of community responsibility; (3) the physical condition of the present plant; (4) the adaptability of the present plant to educational requirements; (5) the adopted spacing standards; (6) the location of sites with relation to transportation, industrial and commercial areas, main thoroughfares with respect to noise and hazard, parks, cemeteries and natural barriers; (7) possible annexations and adjacent communities; (8) rate of growth; (9) finance."

The elementary, junior and senior high school districts are mapped out in a master plan showing desirable locations of sites and buildings in

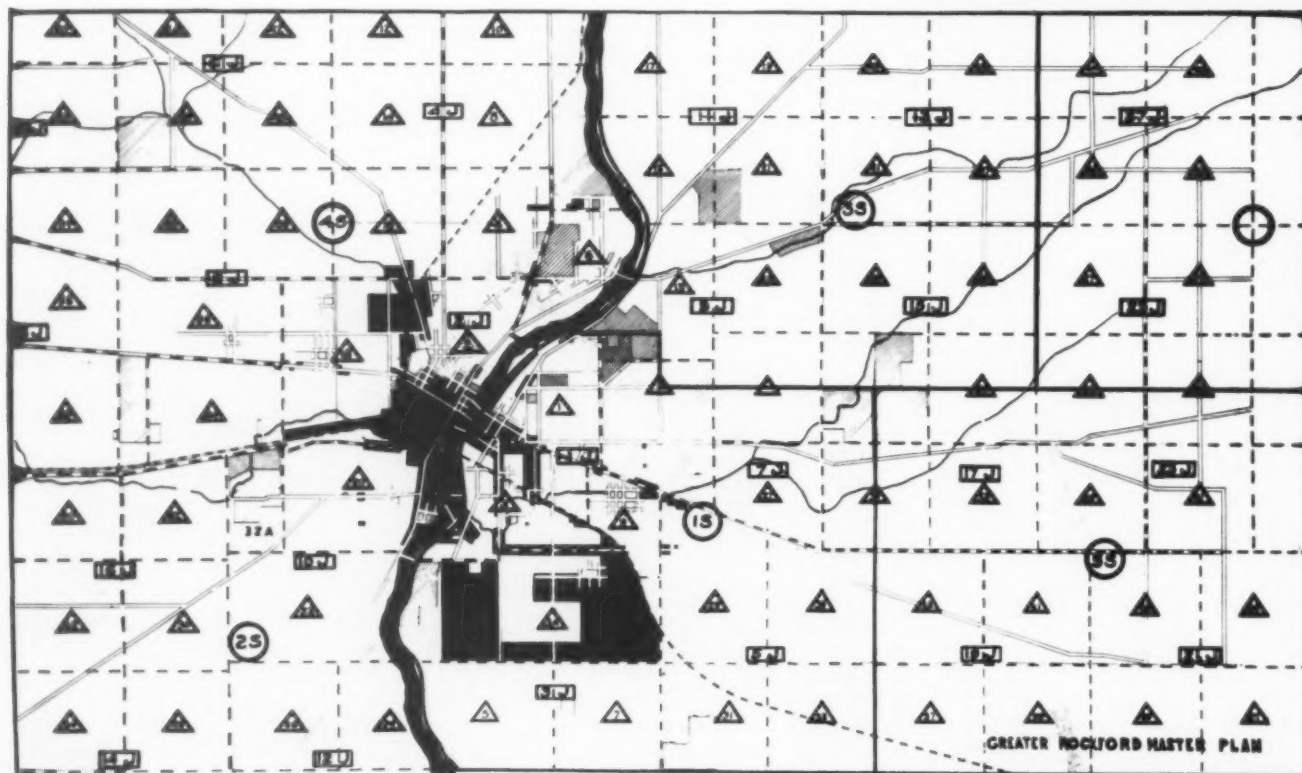
keeping with the development of the city. The financial requirements of the plan and sources of revenue are estimated for a ten year period.

Purchase of two senior high school sites of 15 and 18 acres, respectively, located in residential areas in almost opposite sides of the city, constituted the first action under the long range school plant program. Erection of an elementary school on a 7 acre site in a new residential development followed immediately. The depression postponed and somewhat changed the school plant program, but by 1935-36, three elementary schools located in districts declining in school population, because of a shift in residential development and the extension of a commercial area, had been abandoned. With the help of W.P.A., rehabilitation and remodeling became the principal activity for a period.

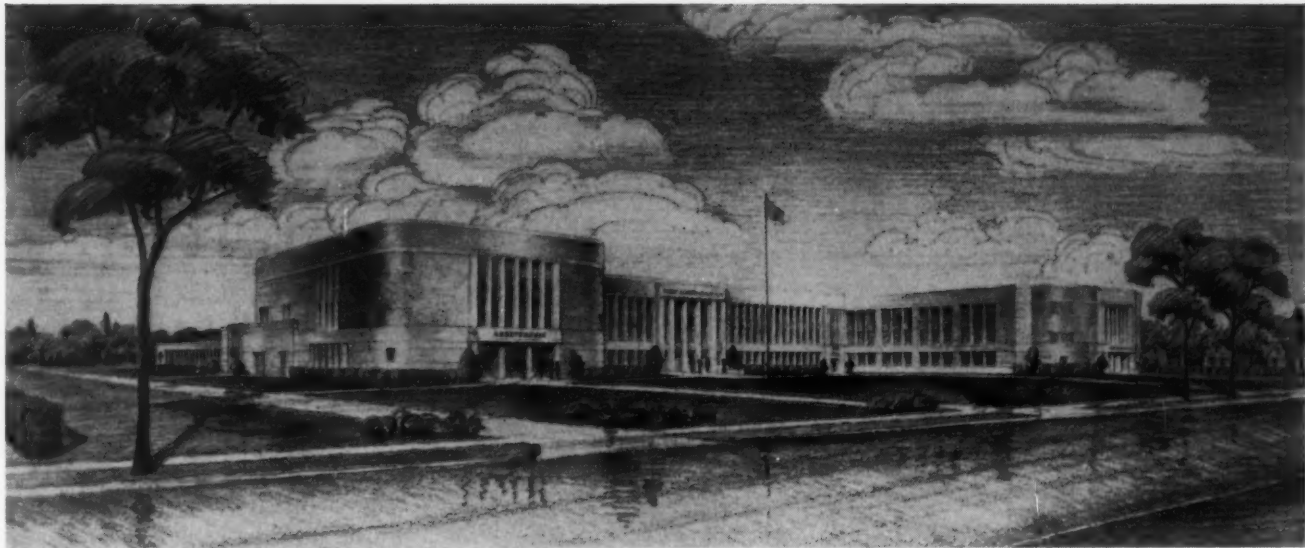
The reenactment of the federal emergency administration of public works (P.W.A.), in June 1938, presented the opportunity of relieving a seriously congested secondary school building condition. To qualify for a P.W.A. grant required prompt action. For a completely changed school administration in office barely one year, the task of formulating a sound building program in a few

weeks' time would have been impossible had there not been available a comprehensive plan prepared nearly ten years previously. A recheck of that plan revealed that, even though a great depression had intervened bringing significant changes, the skeleton outline was still basically sound.

On the basis of the previously formulated long range school plant program now reevaluated, a \$3,250,000 building program, including two senior high schools, a junior high school and an elementary school addition, was approved by P.W.A. for a 45 per cent grant of \$1,472,727 and endorsed by the citizens in a refer-



The master plan for the school plant program, developed in 1930, showing desirable locations of sites and buildings.



Left: A view of one of the new high school sites of 15 and 18 acres in a residential section near the city limits. Above: One of the new buildings.



endum authorizing a \$1,800,000 bond issue.

The program of 1938 continues the development of a school plant program outlined in 1930. The benefits of this plan to the present program have been numerous. Upon rechecking the master plan, it was found that the residential, industrial and commercial developments, though greatly retarded, have followed the general course predicted. While the population growth has fallen far short of the estimate, the outward spread of the residential sections has continued. The validity of the general educational program set up for the community seemed to be well substantiated by current educational trends. With these basic controlling factors remaining constant, at least as to general direction, the present program had a matured foundation on which to build.

The sites purchased at an earlier date proved reasonably adequate and

properly located. With 15 to 18 acres in each, ample space is available for physical education and athletic activities. Located in residential areas near city limits, the schools will be afforded a desirable environment contrasted with the congestion and traffic hazards of a downtown commercial-industrial section. Early acquisition of sites is the only sure way of obtaining adequate space for modern school needs and under normal conditions, the purchase well in advance of contemplated construction is also good economy. Eliminating the selection of sites as an issue during a referendum is highly desirable because it easily can become a bitter partisan affair detrimental to a favorable outcome.

The financial condition of the district was prepared for action by having pursued a systematic plan of buying needed sites years in advance, abandoning obsolete school properties, reconditioning only schools to be retained permanently, retiring previous bonded indebtedness consistently and avoiding sporadic projects, adhering to a planned program.

The campaign to authorize the bond issue was materially strengthened because the proposed program followed a matured plan which had now been reappraised and confirmed. It was identified with different administrations and several groups which added confidence to the proposal. Thus, while the time for presenting the program to the public was exceedingly short, the plan had been considered for eight full years.

From the development and partial fulfillment of this particular school plant program, certain benefits of long range planning are clearly demonstrated.

1. The comprehensive study required for building an adequate long range school plant program develops a valuable knowledge and appreciation of the community's needs. By using local personnel to assist in the study, the benefits are extended greatly and continuous evaluation becomes more likely.

2. Building and following a plan ensure greater continuity of policy. The fundamentals of the carefully developed program stand as a guide to the changing administrative personnel. Closer correlations of physical plant and instructional program will be achieved.

3. There are economy and efficiency in administering current school plant problems as (a) adjusting the existing plant, (b) obtaining proper sites and (c) constructing new buildings under a long term plan. Each step is justified in terms of the whole program.

4. Adequate finances are more likely to be available when expenditures are budgeted for definite purposes over longer periods of time. Hastily considered expenditures are less likely to occur.

5. Wise planning will promote public confidence and support. Actions are not taken hastily or accidentally but according to plans previously scrutinized and evaluated by the public.

All Values Are Not Vocational

DAVID D. HENRY

Professor of English
Wayne University

FORTUNE magazine, adept at measuring public opinion on many questions of current interest, issued a report in February 1939 on what the public thinks about a college education.

Fortune's question was: "Which do you think has a better chance of earning a living today, a high school graduate who has had four years of experience or a man just out of college?"

The public's answers to *Fortune's* question were these:

Classification	Per Cent
High school graduate	34.4
College graduate	33.4
Depends on man and/or experience	14.8
Experienced man better at first, college man better later	9.7
College man gets break regardless of merit	2.8
Don't know	4.9

While *Fortune* is to be commended upon the timeliness of its survey and upon the probable accuracy of the report of opinions, it is to be deplored that the editors appear to join the "blind spot appraisers" of educators. Both the editorial comment and the nature of the question fail to answer the fundamental question in the headline, "What Price College?" The editorial fits into the classification described by a certain well-known college president when he said: "Most people use statistics like a drunk uses a lamp post, for support rather than for illumination."

Pay Check Is Poor Criterion

The first fallacy of *Fortune's* position is the assumption that the values of a college education are measured by the size of the pay check of the college graduate. The editorial says, for example, in referring to John R. Tunis' survey of the Harvard class of 1911: "What he found was a composite portrait of mediocrity and failure. Counterbalancing the illustrious and successful members of the class were such examples as a filling station attendant, a bum who had not

slept in a bed for five years, a graduate who reported that he was 'an utter failure, morally, mentally and financially.'"

Should the picture be otherwise? There is no magic in a college education or in any other kind of education which will make a success out of the inferior. The marvel is that among those who go through college the proportion who are in the extremities of material failure is so small. *Fortune* seems to scorn the "less than \$5000" average income of the group, even though exceptionally high ratings figured in producing this average. What other group would have a better one?

A Shattered Illusion

Fortune says: "By inference these findings shattered the great American illusion, now nearly two generations old, that a college education was open-sesame to happiness and success, worth every sacrifice a parent could make to obtain for a child."

If *Fortune* can help break the illusion, well and good! Such childish faith should be broken to make room for realistic appraisal.

But *Fortune* naively puts too great faith in the significance of the report that "executives, who do most of the hiring, give the high school pupil the best chance by an unqualified vote of 41.6 per cent, against 28.6 per cent for the college graduate." There is no real significance in this poll. Most of the jobs available are on the level of men whose educational achievement is not beyond high school. Employers are frequently fearful of hiring too well trained a man for an ordinary type of job. They do not like the prospect of turnover or personal dissatisfaction. Whether or not the college man can do the job as well as another is not their concern.

The basic point that *Fortune* overlooks entirely is the fact that the

appraisal of the values of college education has changed with the changes in the economic era. The childlike faith in the open-sesame, according to *Fortune*, is being broken. All educators hope so. The strictly vocational and materialistic measure has too frequently minimized the importance of the other values which do not submit to this kind of yardstick. There is no reason for assuming that Mr. Tunis' collegiate filling station attendant did not profit from his Harvard education.

The vocational importance of college work always will be of significance to parents and to students. It may even be the primary consideration, but a surprisingly large percentage of college students, and parents too, are coming to an understanding that there are other values in collegiate education that help a student in his adjustment to life that are as important as the vocational values.

What Better Than College?

The real factor in answering the question "What Price College?" in the present era is: "What better activity than collegiate can a youth who has aptitude for college work follow in the years between graduation from high school and the age of employability?" The answer *Fortune* would find in an analysis of the increase in college enrollments, particularly in urban centers.

By precipitating a discussion of the point, *Fortune's* survey may be a contribution to the development of the concept that, while schools assist in the growth of an individual, schools are not responsible completely for the individual's achievement or lack of it. It is high time that we look for the elements that make for success or for failure in the community as a whole, not in any part of it. College student bodies and college graduates largely reflect the American community of citizens and the college shall have done its part if it assists in removing the extremities of maladjustment.

Applying Science to Failures

HENNING J. ANDERSON

Principal, Graveraet High School
Marquette, Mich.

DURING the last few years the public has become more critical of the results obtained from expenditures for education. The schools, like other institutions, are judged by the character of their products. The nature of the curriculum has become a focal point of interest. The question of pupil failure has been partly responsible for a critical attitude on the part of the public.

Last year the administration of the Graveraet High School of Marquette, Mich., decided upon a scientific study of unsatisfactory pupil accomplishment. The school officers suspected that many analyses of pupil failures by teachers were altogether subjective. They interested the teachers in diagnosing their pupil failures during special periods, in verifying their analyses of failures and in prescribing appropriate remedial procedures. Scientific analyses appeal to the progressive teacher, since pupil failures reflect on the ability of the teacher as well as on the school system.

The basic assumption was that teachers are equipped to make only gross analyses of learning difficulties and that they then proceed to apply remedial measures upon such bases, whereas learning is an exceedingly complex process which involves refined diagnostic treatment.

The teachers reported all cases of subject failure at the middle of each of the six marking periods. The principal interviewed failing pupils during study hall periods and had at his command the pupil's scholastic achievement record, intelligence test scores, personal data and health record. A vocational guidance report was prepared by the coordinator for "vocational" pupils who in the junior and senior years serve as apprentices during the afternoons in various industrial and business occupations.

When a pupil continued to fail after the principal had made all the adjustments possible in the school and at home, the teachers concerned were requested to analyze the failing

pupil, to reteach, test and reteach until they were positive that there was no method that would produce pupil accomplishment. The high school faculty was encouraged by the administration to become more concerned with the philosophy of education, the basic concepts of the purpose of education, the nature of teacher contribution to the curriculum and to the accomplishment of pupils. Faculty meetings were held

Convinced that teacher diagnoses of pupil failures were haphazard, the administrative staff of this Michigan high school applied scientific treatment to remedial measures with resulting pupil progress

at regular intervals to discuss the nature of learning, the methods by which pupils actually learn, the different kinds of learning, teaching technics and good study habits. In an endeavor to learn the real nature of the causes contributing to unsatisfactory pupil accomplishment, the teachers were assigned pupils for special study.

The following is a list of reasons most frequently reported on the failure cards: (1) lack of interest; (2) incomplete work or work carelessly done; (3) poor attitude; (4) lack of preparation and effort; (5) absence and failure to make up work missed; (6) no grasp of subject matter; (7) failure to concentrate; (8) failure to write a satisfactory examination; (9) apathetic; (10) shyness and fear of reciting; (11) day dreaming in class; (12) ignorance of how to study.

These analyses are not listed in the order of their frequency; they reveal, however, that the causes of failure were chiefly subjective opinions and did not reach to the heart of the problem. They were not the product of scientific inquiry based upon the application of diagnostic tests.

Obviously, there were certain "causes" peculiar to the various subject fields. English teachers found that pupils could not read, failed to concentrate on sentence content, were unable to appreciate sentence structure and could not spell. Mathematics instructors reported that pupils were unable to analyze and solve problems and to reason, that they had no mastery of fundamental definitions in geometry and that they were careless in performing fundamental operations. Foreign language teachers said that failing pupils lacked a foundation in English, that they had no language sense and that they could not pronounce words correctly. Science instructors reported an inability of pupils to follow directions, to analyze problems, to understand the principles demonstrated by laboratory work and to acquire a scientific attitude. A typing teacher complained that several of his pupils could not follow directions, lacked finger dexterity, were victims of muscle paralysis and lacked coordination between eye and fingers.

In only a few cases were these teachers positive that their statements were true, having verified them by a testing program and by remedial teaching. Neither were they aware that the school authorities and the public were vitally interested in the real nature of the pupil difficulty.

Faculty members were assigned certain pupils by the principal. The teachers were furnished the failure reports and all other descriptive data for these pupils. Thus, they had at their command the identity of the

pupils involved, the subjects taken, the nature of the learning difficulty as listed by the teacher, even though subjective, and a summary and classification by the office. The teacher then attempted to discover the real

nature of the trouble by giving each pupil one or more diagnostic tests, by reteaching, retesting and reteaching. Subsequently, the teachers' subjective diagnoses were studied in the light of the information obtained by

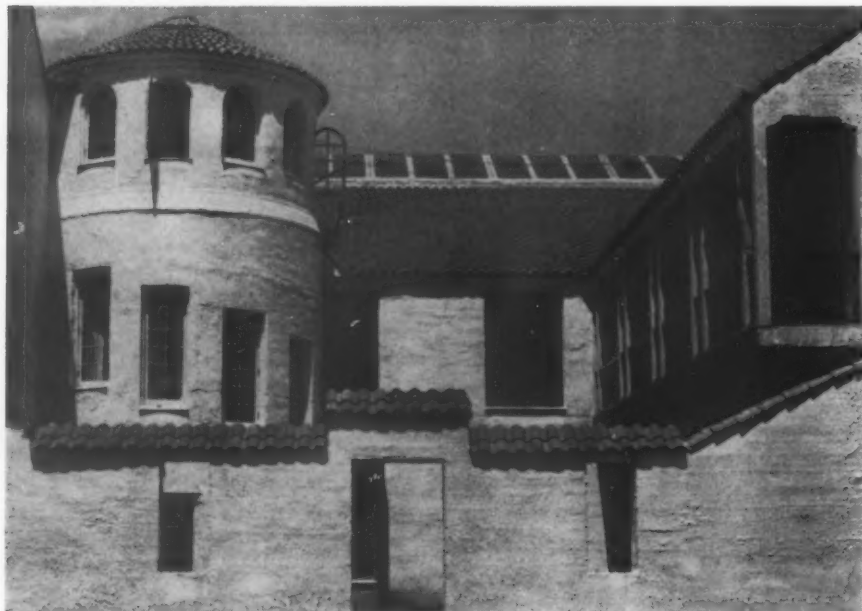
the foregoing procedure. Then appropriate follow-up measures, leading to refined teacher-judgment, were employed. Remedial measures were taken and the pupil was tested again and the results were noted.

Most of this work was done during a teacher's free period or in special sections after school. Some remedial work was done in class as a special group and in connection with the regular class work. In ninth grade English an instructor conducted two units of work based upon the ninth grade Minnesota state test. Five methods were used for theme writing under teacher supervision. Case studies were made. The algebra teacher used the diagnostic tests and remedial drills given in first course algebra by Walter W. Hart. A French teacher gave four twenty minute workout periods, two oral and two written, each week for a period of six weeks, with each pupil taking a test for his particular weakness. Similarly, pupils in other classes reported for special instruction and a testing program and were encouraged to diagnose their own difficulties.

It was concluded from these studies that in many cases teachers cannot analyze learning difficulties in a satisfactory manner without the use of a testing program and without individual research. The teachers became more professionally minded and critical of teaching and learning methods, more cognizant of the psychology of learning and of its application to individual high school subjects. The pupils who received special work improved in mastery of the subject; 80 per cent of them were able to earn a passing mark at the close of the school year. Obviously, diagnostic tests and remedial work cannot make a superior language student of a pupil who does not possess the ability to succeed in that subject. But, the teacher's attention was focused on the fact that there are "dull" pupils who are capable of achieving important goals of education and who should not be dropped from certain courses merely because they are not brilliant performers.

Lastly, teachers should have time and materials to carry on scientific diagnosis; only then can remedial work and progress go hand in hand.

Art Gallery in Small School



THREE years ago the little city of Springville, Utah, (population 4000) found itself with a collection of paintings worth \$150,000, the property of the high school, but with no place to display them save in the halls and classrooms of the school building. Today this community has an art gallery, built at a cost of \$110,000, with the assistance of W.P.A.

The collection was started by John Hafen, a Utah artist of national repute, and Dr. George L. Smart, a teacher, who sought to stimulate art interest in the school through donation of pictures. The first collection of 16 pictures was unveiled formally in 1907. The permanent collection now includes some 150 oil paintings and an undetermined number of etchings, monotypes, water colors and pastel sketches. Each spring these pictures are stored away to make way for an exhibition of works in an annual salon from which are purchased three pictures to be added to the high school art collection.

Actual ownership of the building is vested with the Nebo School District, while its administration is entrusted to an art board. The building contains five large galleries, a Little Theater, lecture rooms and lounge rooms. The exterior walls are of reinforced concrete, representing crude plaster finish; the roof is of red tile and the upper galleries have skylights the length of the rooms. Interior display walls are paneled with bordered green burlap and a concealed angle lighting system illuminates the paintings. The floors are of red tile, shaped and burned on the project.

The basement contains packing and storage rooms while the first floor contains a band room, two display rooms, office, classroom, lobby, music room, instrument room, master room and a hall where a part of the sculptors' exhibit is placed. The second floor has three display rooms, a dramatic art auditorium and a kitchen. Grounds harmonize with the Spanish building.

Rational Bases for Federal Aid

PAUL R. MORT

Director, Advanced School of Education
Teachers College, Columbia University

STUDY No. 5 of the Advisory Committee on Education points out three major inadequacies of the present system of school support in the United States, develops patterns of federal support aimed to correct these deficiencies, indicates various methods of approaching the desired results, together with their implications, and shows how these plans provide a guide for appraising federal aid bills.¹

Do the facts in the known principles of school finance provide any rational basis for federal aid short of complete equalization of the burden of a defensible foundation program? This is one of the questions that in one way or another consumed a great deal of time of those members of the staff of the Advisory Committee on Education who dealt with the problems of principles and methods of distributing federal aid for education.

The question was never raised in exactly this way. It was raised rather by proposals to give considerable aid to the poorest half of the states or to the poorest third. These types of situations give the key to the answers either proposed or assumed.

Such a pattern was discovered which, it is believed, is thoroughly defensible. It provides for the assuring of a given foundation program in all states without making such demands upon those states required to expand their programs that they would be forced to withdraw support from their able communities.

It would require only slightly more than half as much federal aid as equalization. It would give aid in proportion to financial need to all but 11 states and the District of Columbia. No plan was discovered by which aid could be given to a

Established facts and principles of school finance provide a rational basis for federal aid to education and would require less aid than would equalization

smaller number of states without involving these states in commitments that would retard the general development of their educational programs.

Our answers, then, to the question raised at the beginning of this section are that the facts and principles do provide a rational basis for federal aid to education which would require, in the long run, less aid than equalization would require. Any plan that grants aid in proportion to financial need² to all but ten or a dozen of the ablest states would fit into this general pattern. We shall refer to this pattern as plan 1.

Equalization requires almost twice as much as the foregoing plan. What does it add? In practice the equalization pattern requires that aid be granted to all but the two or three ablest states and that this aid be distributed in proportion to financial need. It utilizes a lower rate of state and local contribution to the foundation program. To all states receiving aid under plan 1 it gives additional aid in proportion to their taxpaying ability and, in addition, provides aid to all but the two or three ablest states which receive no aid under plan 1.

It provides to the poorest states funds that they would not be able to obtain from any revision of their

tax laws. This would hold also for the least able states not receiving aid under plan 1, which would get back more than they pay under plan 2. It provides to the ablest states part of the funds that they could receive from a revision of their own tax laws. Its net effect, therefore, is further to improve the basic financial health of the states that would receive aid under plan 1 and of a few borderline states that do not receive aid under plan 1, and to bring some measure of the fruits of tax reform to the other states receiving aid under the equalization plan. Any plan, regardless of the total amount of money involved, that grants aid in proportion to financial need to all but the two or three ablest states is directed toward the equalization objectives.

Is there any need to provide substantial aid for all the states? Most of the federal aid laws that have been before congress have evidently assumed that the answer to this question is "yes." Back of this assumption was undoubtedly the political difficulty assumed to be a barrier to granting federal aid only to the poorer states. But over and beyond this there is a justification in principle. Aid granted to all states assumes a pattern that would eventually cost more than the billion required by the equalization plan, plan 2. The distribution device would call simply for a reduction of the state and local contribution, or in the case of flat grants, for its entire elimination. Additional aid (over plan 2) granted under such a plan would therefore go to all states in proportion to their taxpaying ability. The only exception would be in terms of the aid granted to the two or three of the ablest states that receive no aid under plan 2. They would not begin to receive aid in proportion to their ability until the rate of local contribution became less than that required exactly to support the foundation program in the state.

Apart from these exceptions, then, we may think of aid granted beyond

¹Mort, Paul R., and Lawler, Eugene S.: *Principles and Methods of Distributing Federal Aid for Education*. Study No. 5 of the Advisory Committee on Education. Washington: Government Printing Office, 1939.

²Financial need refers to any index of the amount of federal aid required to supplement the state and local contributions, defined in terms of taxpaying ability, in providing the funds for a defined foundation program.

Are English Teachers Cloistered?

THE most important thing for English teachers to do as part of their preparation is to get a job or jobs in some entirely different field for a year or more, Dr. Malcolm MacLean, director of General College, University of Minnesota, told the National Council of Teachers of English.

"English teachers more than most should have an experience of life outside their jobs, because it is their task to interpret all the many aspects of human life as seen through the eyes of writers. English teachers spend twelve years in school, transfer immediately to college or university, go from that into graduate school and thence directly into teaching. In con-

sequence, an abnormally large proportion of their lives is devoted to vicarious experiences instead of real.

"Many of them form the bad habit of herding primarily with other English teachers. At faculty meetings, because there are so many of them and because they speak with some facility, they often dominate other faculties. The breaking of this habit means the smashing of the clique spirit and the continuous drive to come to know, to work with and to understand teachers in other fields, as well as men and women in other occupations. Teachers should maintain an attitude of experimentation and should learn new ways to evaluate their teaching."

that required by equalization as money collected by the federal government as an agent of the states and distributed back to the states. As such, it adds nothing to what might be collected in the states themselves by a good system of taxation.³ The only advantage is that which arises from the central collection of taxes. Among the advantages claimed for such central collection of taxes are that it would take all states along together on tax reform.

At first these points may seem to have little bearing on education. We see the educational significance, however, when we realize that with perhaps the exception of one state, Delaware, local initiative, supported by the general property tax, is being supported by a tax relatively overburdened as compared with other potential taxes. If this is the case, the true operation of local initiative is being handicapped in these states by the financial structure itself apart from any other factors of control, organization and leadership which may be operative.

The need for correcting this feature of our financial structure is quite as important for education as equalization. Equalization, after all, is a static principle. In itself it does not

make adequate provision for the continued adaptation of the program to changing needs. For this dynamic aspect our system depends in no small degree upon local initiative. If local initiative is inadequately financed, our educational programs will suffer. The question is whether or not the central collection of taxes over and beyond that required for equalization will greatly expedite the tax reform necessary to the health of public education. Needed tax reform is therefore a crucial question in education.

Any plan, regardless of the total amount of money involved, which grants aid to all of the states either on a flat grant basis or with some relation to financial need is directed toward the attainments of the objectives of plan 1 and plan 2 and, in addition, toward needed tax reform. We shall refer to the flat grant basis as plan 3 and to any plan which grants aid to states with some relation to financial need as a plan intermediate between plan 2 and plan 3.

Study No. 5 of the Advisory Committee on Education proposes as a defensible foundation program a program that would cost \$48 per weighted census unit. This is equivalent to \$60 per weighted elementary pupil unit (based on attendance). To establish such a foundation program without placing more handicaps on

local initiative than it now carries would require \$576,000,000 of aid. This provides a basis for determining the adequacy of any federal aid bill following the pattern of plan 1. For example, a federal aid bill distributing \$100,000,000 according to plan 1 would go 17.4 per cent of the distance required.

Plan 2 adds to the objective of plan 1 that of the equitable distribution of the burden of supporting the defensible foundation program. This plan would require \$1,179,000,000, approximately half of which (\$576,000,000) would go toward assuring the defensible foundation program and the other half toward the further equalization of the burden involved in plan 2. A bill designed after the pattern of plan 2 and providing \$100,000,000 would thus go 8.5 per cent of the distance required to meet the objectives recognized by this plan. Obviously it would only go half as far in meeting the objectives of plan 1 as the same amount of money distributed under plan 1.

Plan 3, which recognizes in addition to the objectives of plans 1 and 2 the tax reform objective, would require on a flat grant basis \$1,978,000,000. A federal aid bill providing for the distribution of \$100,000,000 on a flat grant basis would thus go only 5.1 per cent of the distance required to meet all three objectives. Thirty per cent of the amount would go to assuring the foundation program, thirty per cent for further equalization of the burden of that program and 40 per cent for tax reform.

Plans giving aid to all states but taking differences in ability into account fall between plans 1 or 2 and plan 3. For example, a bill designed after the pattern of plan 2 but carrying a minimum guarantee to the ablest states of one-fifth the average grant per pupil would require \$1,340,000,000. A federal aid bill providing for the distribution of \$100,000,000 on this basis would go about 7 per cent toward meeting the objectives of plan 2 and about 1.5 per cent toward the tax reform objectives of plan 3. Of the \$100,000,000, 44 per cent would go toward assuring the foundation program, 44 per cent toward further equalization and 12 per cent toward tax reform.

³It is claimed by some tax experts that tax reform never can be as effective if left to state administration.

Making the Yearbook Pay Its Way

E. H. BREMER
Superintendent of Schools
Constantine, Mich.

MANY small high schools have discontinued the publication of an annual or yearbook because previous efforts have resulted in the red. There is, however, a method for financing and publishing a yearbook that has the advantage of assuring all funds needed before committing the school to contracts for engraving and printing.

Few schoolmen question the value of an annual publication to the pupil as a worth while record of events, or to the school itself, as a desirable means of publicity. The new technic available for making good action pictures indoors, as well as on the playing field, is understood by ardent camera fans in every school. Under the leadership of the science teacher or camera club adviser, pictures of school activities may be obtained that a few years ago were prohibitive to all except the larger school. This has come about because of the general use of the speed flash gun and the modern portable flood lights that allow picture making under many conditions.

Recent practice also shows that the publication of the modern annual furnishes valuable experience for a much larger group of pupils than was formerly the case. The cooperation of English, science and commercial departments in the small high school provides a type of experience and correlation of activities that can be had in no other way. In making preliminary plans, representatives of these three departments should advise with the faculty representative in charge of the project. At this meeting a plan of action for the work of each of the departments should be evolved.

Contrary to former practice, the modern school annual should be built around the pictures used. It takes its clue from the highly successful picture magazines, such as *Life*,

Modern school annuals capitalize upon the camera fad in obtaining informal pictures of school activities, such as these photographs illustrate.



Pictures such as the one above, depicting drill work in rapid dictation, help to explain the work of the school to the community.

Too many group pictures may be avoided if organizations, such as the dramatic club, at right, are photographed in action.



and uses the printed word to explain the picture rather than pictures to illustrate the book. There is a vast difference. Formerly, long articles, including such things as class histories, athletics and scholastic achievement, were written by pupils. Today the picture must tell the story. The written article should reiterate and amplify the story found in the picture and should, of course, be written only after the picture has been accepted as suitable for the activity in question.

Opportunity for creative writing has not been destroyed. On the contrary, more skill is required to write a good terse and readable legend than was the case when the story was the all important thing in the minds of the editors. If there is any question in the minds of the faculty sponsors about the new attitude, ask them merely to consider how many pupils ever reread the articles after graduation. They do look at the pictures and often wish that some cherished event might have been recorded through photography.

Recent trends also indicate that the old snapshot page and most of the group photographs have been eliminated from the modern school annual. Instead, photographs are made in sequences of related events or activities. For example, pictures of activities in the commercial department show the chief activities of that department with pupils typewriting, taking dictation or operating the mimeograph and the adding machine. These pictures should display good head sizes and should be arranged on a special page for each department, with accompanying explanatory stories.

The cost of using many more photographs and halftones may be met partially by having the staff members mount a number of related photographs on a single sheet of cardboard with narrow division lines between the pictures. The engravings made from the composite can later be cut along the division lines according to some general plan. The point is that the engraver's charge for a 6 by 8 inch composite panel of four photographs is much less than the charge for four 3 by 4 inch halftones.

It is of first importance that the camera club or photographers on the staff plan a schedule as early in the school year as possible, arranging for

Each activity represented in the pictorial yearbook pays for its own halftone. One money making venture was a waffle supper in which the boys did the cooking.



all activities that are to be photographed and a time schedule for them. The modern annual uses candid photographs. Stilted poses are avoided as well as pictures of pupils and faculty that are made deliberately embarrassing to the individual. If individual portraits are desired, the pupil photographers are able to take them with modern equipment at a set focus and with a suitable background and lighting.

Experience indicates that it will be well to take many more photographs of the varied events of the year than will be used in the final selection. Such a plan makes it possible to discard all "fuzzy" pictures that will not reproduce well. If 100 pictures are to appear in the book, it is well to plan on taking 300 or 400 photographs with duplicates to allow for a lack of skill in photography.

A good schedule should also provide for seasonal activities that cannot be retaken in the event of failure to obtain good pictures. When it is necessary to call pupils from classrooms for photographing individuals or groups, pupil assistants should obtain the approval of a time from the teachers in charge of classrooms. This prevents the school schedule from being imposed upon. These assistants also will be valuable in helping to escort the pupils quietly to the room where the floodlights have been set up if the pictures are to be taken indoors. A little preliminary planning will save much time in arranging groups and in avoiding confusion.

Too many group photographs may be avoided and the value of the an-

nual enhanced as a record of actual events if the dramatic club is photographed in an action picture, such as building a stage set or taking part in a scene. Since the entire cast of a school play usually cannot be taken in a natural bit of action, it is best to make several "shots" showing the actors in the high spots of the play. A composite can then be made of these pictures.

The same procedure will apply to other school activities. Classroom pictures, experiments in the laboratory, pupils at work in the shop, pupils entering the building and games all lend themselves to this technic. When a game is to be played with a rival team, show the pupils with their luggage as they leave school and as they board the bus or train. Then show them getting last minute instructions from the coach; show the toss-up between the captains, the goal line being crossed or a clean tackle being made. Finally, show the reception that the home town crowd accords the victors. Such a sequence gives pictures a sense of reality.

All photographic finishing should be done in the school by the pupils themselves. Prints should be made on glossy paper only. If a 9 by 12 cm. camera or a larger one is used, only a few enlargements need be made. In our own school the pupils in the general shop made a highly satisfactory enlarger from plans to be found in the December 1937 issue of *American Photography*.

A cardinal principle for advisers of small school yearbooks to follow is not to let contracts for halftones,



The work of the commercial department is effectively portrayed to the community in this informal picture of the type-writing classes. The commercial work may be shown in a department series.

printing and binding until all of the needed funds are clearly available.

First of all, each activity represented pictorially in the yearbook should pay its own way, that is, each group sponsoring an activity should raise its own funds to pay for the cost of the halftone used. In most cases this will not exceed \$4 if the composite plan of photographs is followed. Activity fees may come out of the club treasury and may be obtained from dues, assessments or from the hundred and one ways that groups have for raising money. The effort expended by the various activities in raising money for halftones not only prevents a direct drain upon the parents' pocketbook, but it also creates real cooperation and evokes worth while interest in the book.

Our pupils have put on penny carnivals, given waffle suppers where the boys did the cooking, staged one act plays, sponsored school dances, held candy sales and sold insignia.

A meeting of all activity officers and sponsors should, of course, be called and the plan carefully explained as a preliminary to obtaining their unqualified support. Without their support the plan will fail, since the publication of an annual is a high type of cooperative effort, of which there are all too few at present. At the outset the sponsor should make it clear that the annual is not a faculty annual, that it is for the pupils. After obtaining the approval of all groups in the school, a careful estimate of all needed expenses for halftones, printing and binding should be made. It may be necessary to make a special assessment upon the

treasuries of the senior and junior classes, depending upon whether the book is to be published once a year or every other year. Such an assessment is entirely justifiable if individual pictures of seniors and juniors are used in the opening section of the book. Experience shows that in no case need this be more than \$1 per pupil, since the pupil photographers will make the portraits and may even furnish one unmounted portrait to the pupil without additional charge.

The second step in assuring sufficient funds is to hold an advance sale of subscriptions on either the advance payment or the installment plan. While the cost for a single subscription will be determined in part by the number of pages in the book and in part by the amount of paid advertising to be obtained later, in no case need the small school annual subscription be more than \$1 per book. The activity fee plan has obviated the need for that.

The Milford Township High School at Milford, Ill., found that there need be no subscription charge at all. A copy was furnished free to each high school pupil. In order to be on the safe side, however, it is a good policy to tell the student body that if there is a reasonable balance in the annual treasury after all bills have been met the balance will be divided among the class treasuries.

The third step in financing the yearbook is that of obtaining pledges from the businessmen of the town. As is the case in obtaining subscriptions, pupils should be chosen as

advertising sales managers upon the basis of their evident ability in a business way. Preliminary meetings should be held to determine the plan to be followed and to meet expected sales resistance. It is here that the commercial department can function effectively in training the amateur salesmen and saleswomen. Their task is to convince the business men in the community that, aside from the direct advertising value to be found in an annual, a modern activity yearbook also reflects much of the spirit of the community itself.

Two types of advertisements may be obtained: space or complimentary line advertisements. A combination of the two plans should not be used. If the first type of advertising is solicited, make up a dummy book showing the usual display advertisement that each merchant uses in the local daily paper. It is up to the advertising manager to convince local businessmen that advertising in such a medium has a real money value. As a starter, determine the circulation of the local paper and make a fair comparison with your own school publication.

The money derived from advertising and from the sale of the books will cover the cost of printing and binding unless the program that is undertaken is too ambitious. In our own school a fourth source of income has been used, that of selling copies of the photographs of athletic teams and other school groups or events to the pupils. Such a source of income should probably be used only to defray the cost of photographs and chemicals. An apparent objection to the sale of photographs is that they cannot be sold until the annuals have been delivered to the purchasers. To sell such pictures beforehand would spoil much of the pictorial value of the book. On the other hand, the average school will have its pupil photographers take many more pictures than can be used. Good rejected photographs can well be sold.

It is best for the school with an enrollment of less than 200 pupils to publish a yearbook once every other year, such a book being the joint work of the junior and senior classes. Such a school also will do well to limit the book to 70 pages and not to spend more than \$270 for halftones and in excess of \$3.50 per page for printing and binding.

Chalk Dust

NOWADAYS when government grants have stopped falling like manna in the wilderness, some of us who are tired of elections and specifications and blue prints need a real vacation. Acres of diamonds! We don't need to go far. Just slip over to that fifth grade where the teacher is doing a real job of her teaching. It is so easy to forget why schools are built, why beautiful offices are planned, why elaborate piles of stone are erected. That little teacher is the answer, that fifth grade is the complete justification.

• •

Should Mother chance to visit school
Somewhat complaintfully,
The teacher talks I.Q.'s and norms
And deep psychiatry.

When Dad, with anger in his eyes
Calls on the sweet school marm,
She looks at him with mild surprise
And registers her charm.

If, pacified, the folks depart
With mutual admirations;
The learned scholars praise the art
As public school relations.

• •

SENATOR WHOOSIZ (Lectures: \$250 to service clubs; \$50 to ladies' auxiliaries; free to constituents) flails his arms and beats his chest and says it is high time for the schools to take a little interest in education for character. "There ought to be a law," says he.

There ought to be a law to compel the senator to go back to school for ten minutes a year just to see what's going on!

• •

JUST as certainly as the school year totters to its weary close, comes summer school. And just as certainly as summer school, comes the decision that must be faced by the teachers of the nation: to go or not to go. The college professors, who have taught the more naïve and trusting undergraduates for the past year, gather their wits for the annual six weeks' battle that is coming. Ponderous pedagogical jokes are refurbished, long winded discussions are air

cooled. The learned professors know, from sad experience, that their courses in methods will have to be a little more streamlined and their dissertations on psychology, a little less vague. The horde of skeptics, the "in-service" practitioners, is coming back.

May the flight of teachers to summer school never grow less! May the ambitious novice and her supervisor, the scared but brave little lady from Jamestown and the athletic coach from Rye Neck (yea, and sometimes even the learned superintendent) sit down together in harmony and democracy at the summer fountain of wisdom and drink deeply. For of such is democracy in American education. What though the fountain may run dry in those first humid days of August? Except ye become students, ye cannot enter the fellowship of scholars.

• •


WILLIAM McANDREW believed in being a "specific praiser" and not a mere flatterer or general dealer in honeyed words. He was wont to give a monthly verbal bouquet to the teacher or administrator who had performed some particularly meritorious service.

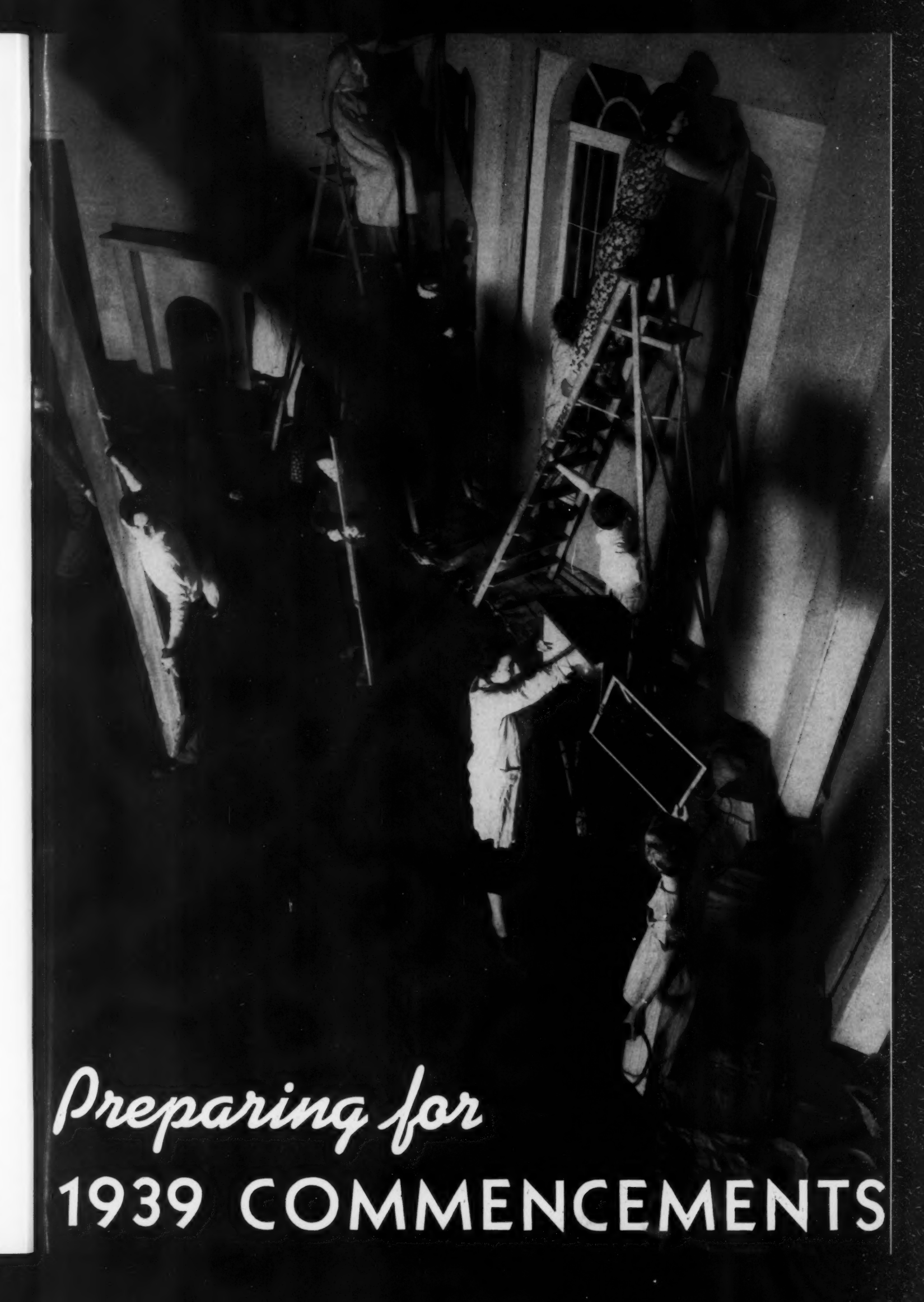
Andy Mac would rejoice this month in giving his award to that teacher of a rural school in Rhode Island. She has earned the county prize awarded by the Garden Club to "that housewife, gardener or other person" who has made most progress during the past year in beautifying his (her) place of residence or business.

Unfortunately, the name of the teacher has slipped away. Nevertheless, to the unknown teacher and her pretty schoolhouse, let us award the monthly bouquet.

• •

AND when the sum of life is totaled for me, as it must be for all men, let it be said of me: He was a school teacher. But he taught children instead of school. He taught children because, in some dim way, he felt he was giving his bit of service to the world, that he was carrying forward, however inadequately, the ideals of democracy of which his fathers dreamed. He felt that teaching children brought him a little nearer to God.





Preparing for
1939 COMMENCEMENTS

A Time for Youth to Prove Itself

IN THE simpler cultures, when the boys had completed the types of training required by the tribe and had achieved a specified standard of skill in hunting, fishing, fighting and in the tribal lore, they were put to certain tests of courage, strength and endurance. Upon the satisfactory completion of these tests they became adult members of the group. In our own times this original initiation ceremony of youth into full community membership is symbolized by the school commencement, the beginning of adult life.

In the earlier days in this country when schooling was simple and brief, the commencement period was placed at the so-called common school level. Later, as secondary schools and advanced institutions of learning grew and developed, greater emphasis was placed upon the terminal exercises in these institutions. Today, the terminal ceremony of the elementary school has fallen practically into insignificance and in terms of numbers the secondary school commencements throughout the country vie in importance and even in publicity with the colorful closing exercises on college campuses.

COMMENCEMENT is the ritual symbolizing the fact that the institution's work has been completed and that youth's participation in the real world is starting. It is an important event for the boys and girls as well as for the parents. To the youth it offers an opportunity to prove to the world their readiness to take their normal place and responsibilities in life; to the parents, an opportunity to see the work of their children as symbolized by this terminal appearance. Commencement time should have great interpretative significance.

In the smaller communities much more is practically possible in the way of commencement significance than is usually true in large centers of population. Frequently, the better part of a week is given over to these exercises, thus providing means for successfully diversified programs and appeals.

THERE are two major types of commencements: the conventional program and the activity program. Regardless of type, the program should be dignified without becoming pompous, stilted or tiresome. Whatever schools attempt must be accomplished within one and one-half hours or else they run the risk of failure through audience overexposure.

The typical commencement program includes an invocation; stilted salutatory and valedictory speeches by pupils, selected on the basis of mechanical scholarship rather than because of their ability to express themselves; an official commencement speaker who usually preaches to either children, parents or both on some topic utterly unrelated to the central issue, and the official institutional blessing and distribution of diplomas by either principal or superintendent. The exhortatory commencement speaker is probably the conventionalized medicine man of ancient times. He is generally not as effective as was the witch doctor, who was aided by an awe-inspiring makeup.

The activity type of commencement program, now rapidly growing in favor, is functional in character and indicates a return to the original theory of "commencement" as a time for youth to prove itself. The participants are the graduates themselves and the theme they present is frequently an excellent symbolization of the meaning of the educational process. It may take the form of a pageant, a series of tableaux, vignettes of everyday school activity, a ritualization of themselves to the adult world before them or straight dramatization of youth problems or achievements. When carefully staged and well timed, these amateur presentations have all the freshness, vitality and appeal that make youth so interesting to people over 40. Their interpretation of the school and of its work and value is immeasurably more effective than the well-paid, well-fed, if not always well-polished "big-name" speaker.

Either type of program may be supplemented by attractive exhibitions of school work, so carefully staged that they have a drawing power of their own, postprogram meetings between teachers and parents and other social activities. The school building should be made as attractive to the eye as possible and its facilities available to and understandable by visitors.

ONE word of caution! If you work in a community that is accustomed to the conventional type of program and likes it, try to improve it without changing its basic character too quickly. If you desire to move from the old and accepted to the new, do it by gradual steps. It may require five years to move completely from one plan to another. Do not allow your desire for the new to overcome your time sense. If you do, there may be many regrets. Traditions must be changed slowly.

Arthur B. Hochman

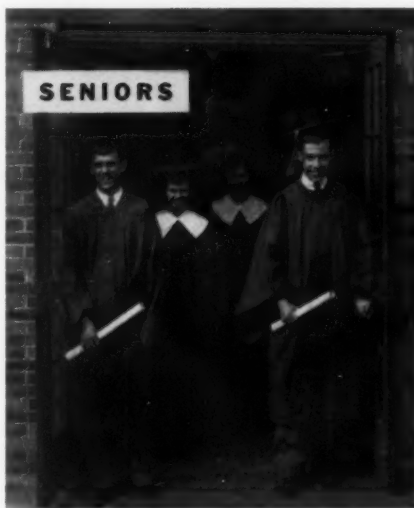
Honor Where Honor Is Due

AT THE beginning of the second semester of every school year, seniors and administrators begin to think about the forthcoming commencement exercises. For many pupils it will be the only commencement exercises in which they will ever participate; for some it will be the only occasion in their entire lives in which they will be guests of honor at a public gathering.

Let the high school principal or superintendent, then, consider the importance of the occasion when he arranges a program that will mark the last honor that the high school has to confer upon its pupils. Let him provide for pupil participation other than the receiving of a piece of parchment that will prove the recipient a graduate. In some communities the entire program is conducted by the graduating class. Perhaps this is too much responsibility, but certainly one or more valedictory addresses would be well received. This arrangement not only would give deserving graduates an opportunity to exhibit their abilities but would furnish ambitious members of succeeding graduating classes with one additional goal and honor for which to strive.

In every graduating class a few outstanding members have accomplished things during their high school careers for which they can be justly proud. Since commencement night is the time for awarding honors, it is fitting that the achievements of honor pupils be made public and the individual pupil cited in some manner for his achievement. If recognition is not given on this occasion, it probably never will be given and his pleasure and satisfaction in having excelled will have been stifled. Likewise, underclassmen will be deprived of one motive for attaining excellence in their chosen fields. Let these citations be not only for superior achievements in scholarship but for any other line of school work in which pupils participate. That will include athletics, attendance, debate and citizenship.

People of all ages respect pomp and splendor in the conferring of honors. The cap and gown, which is symbolic of educational graduation exercises everywhere, is a means of satisfying this innate desire for "dressing up," so why not use it in the high school commencement exercises? Commercial advertisers who wish to depict a graduate invariably offer a picture in which the subject is clad in cap and gown. Its use will often add a touch of color that



The caps and gowns add dignity.

cannot be realized in any other way. For this one occasion of the year let every member of the faculty appear in the garb of his alma mater, properly indicating the degrees he holds. The spectacle of this assembled group of principals in a commencement exercise will be one that every member will proudly remember.

In some localities it is customary for members of the graduating class to participate in some of the menial parts of the program, serving as ushers, distributing literature and playing in the orchestra. Work of this kind, on the night when he is guest of honor, detracts from the dignity that he is rightfully expected to exhibit. Underclassmen should perform these tasks and every possible

PAUL K. CHURCHILL
Principal, High School, Bremen, Ind.

means should be used to make the graduate happy and bright on his graduation day. Let him glory in the honors that are his.

It has become a well-established custom in many schools to engage the services of some outstanding speaker to address the members of the graduation class on commencement night. Often, however, this speaker is placed in the position of becoming the main attraction, whereas the original intention was to use him as a tool to pay homage and respect to the guests of honor. Perhaps the most important thing to consider in selecting a speaker for this occasion is not the subject on which he will speak, but the amount of time he will use. In order that the graduates need not be required to share the limelight, let the speaker limit his remarks so as to require a maximum of thirty minutes for delivery. In many cases this time could well be reduced to fifteen minutes.

Advancing tax rates have caused school officials to seek ways and means of curtailing expenses. In many places one method of accomplishing this end has been to establish an admission charge for attendance at the annual commencement day exercises. It would seem that this method of economy might defeat the purpose of the exercises, since it is certain to decrease the attendance. In some cases it might be impossible to present a free program, but every effort should be exhausted to remove all restrictions on attendance.

Get the entire community there to see this final honor of the secondary school bestowed upon its youth. It will give them a healthier outlook on life and more confidence in their abilities to assume their respective places in society. Let their achievements be recognized by presenting a well-planned commencement day program. Let this day be made a vital part of the lives of high school graduates.

Selecting a Theme

EVAN E. EVANS
Superintendent, Winfield, Kan.

FOR fifteen years or more commencement exercises at Winfield High School, Winfield, Kan., have been built around the five honor pupils. The graduating classes have fluctuated from 150 to 180 in size, with an average size of about 165. From this group five honor pupils are selected on the bases of scholarship, citizenship, activity participation and general service to the school.

First, the entire class is ranked scholastically and the upper third of the class determined. Then the pupils of the class, using the bases described, select the first 25 pupils. This list of 25 is given considerable publicity and it is considered by the pupils of the class and by their parents a real honor to achieve this rating. Next, the faculty members cast a series of ballots, first selecting 10 and then the five who are the honor pupils. All faculty members are entitled to vote, using a weighted ballot. A first-year faculty member may cast one vote each for five pupils; faculty members who have been in the school two years cast two votes each, and so on to a maximum of four votes each for five pupils. These five pupils are selected immediately following the close of the thirtieth week of school. Together with the principal, they set up the commencement program.

Usually a theme is selected and the program is built around this theme. For a number of years the

cardinal objectives were used with a commencement program given over to each objective. The eighth objective proposed by L. W. Brooks of Wichita, Kan., while he was president of the Department of Secondary School Principals, is international understanding. That has been used several times as the theme of the commencement program.

One of the honor pupils presides at the commencement exercises. Usually there is one in the group who is sufficiently musical to furnish a special number and the other three prepare papers which they read. Almost always one of the group selected is a leader in the forensic activities of the school, and when any of the honor graduates are particularly interested in certain fields of study they are given opportunity to use that field as the basis for the paper presented. Last year one of the honor pupils was an art major and used as her theme, "Art, the Universal Interpreter."

In this community of 10,000 people the commencement exercises are held in Stewart Gymnasium, which seats approximately 3000. We are never able to accommodate all those who wish to attend. The auditorium is equipped with loud-speakers.

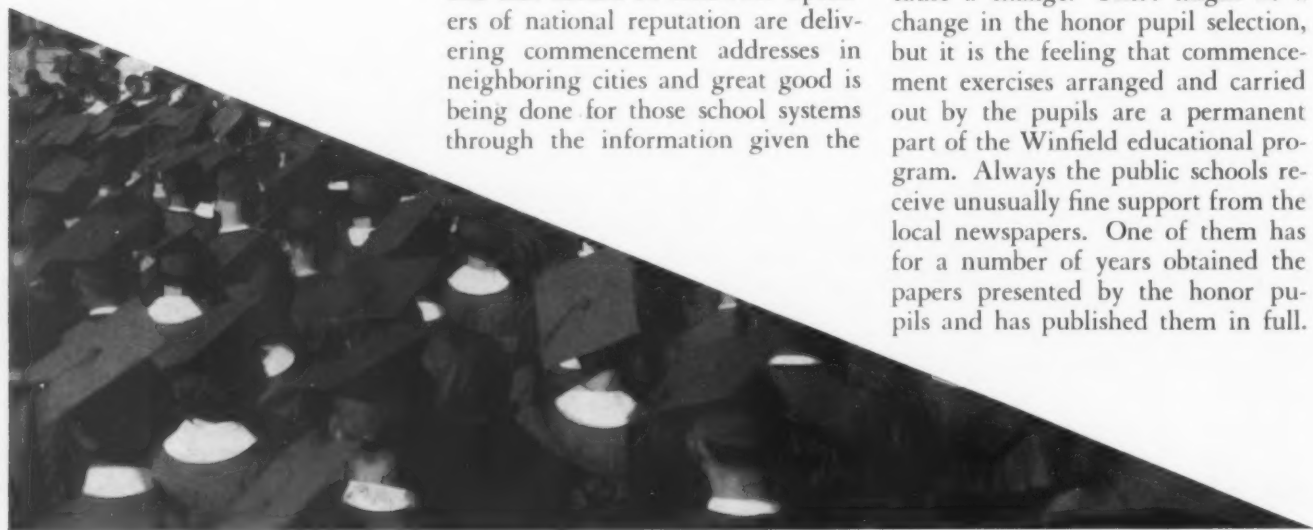
Almost every year when the commencement season approaches the school authorities and members of the board of education wonder if their commencement program is the one that should be followed. Speakers of national reputation are delivering commencement addresses in neighboring cities and great good is being done for those school systems through the information given the

patrons by these social, educational and economic leaders.

After our commencement exercises are finished and the great numbers of parents and patrons show the real enthusiasm they have for these high school people, we feel that no outside speaker could furnish the effective liaison between the public schools and the patrons that this pupil commencement does. When these people hear discussed as they did last spring the question "Youth Looks at Democracy" and listen to the following paragraphs from a high school senior, they have the feeling that after all the Winfield public schools are a good place for their children to be:

"Can a democracy exist in a social order as complex as ours today? Can we go on running our own government which offers to its citizens the freedom of religion, speech and assembly, the right to elect its own officers, the right of a trial by jury and many other privileges we have taken for granted and which exist in few countries today? Are our interests so varied and our problems so complex that for their solution we must have a dictator to rule with an iron hand, leaving us no choice but to do as we are told? I feel that I express the opinion of the youth of America when I say, I want a hand in my government."

The practice has been continued here long enough that nothing short of a community revolution would cause a change. There might be a change in the honor pupil selection, but it is the feeling that commencement exercises arranged and carried out by the pupils are a permanent part of the Winfield educational program. Always the public schools receive unusually fine support from the local newspapers. One of them has for a number of years obtained the papers presented by the honor pupils and has published them in full.





One Program for Three

FINE things have been done in the direction of improved commencements. The three high schools of Fort Wayne, Ind., produced some time ago a combined program which had many unusual features.

In organizing this combined program committees were appointed in the fall and the various details carried through the year in the three schools separately. It represented the services, thinking and assistance of practically all departments.

The scene was an athletic field, equipped to seat 16,000 with chairs and bleachers. This, in itself, was a great undertaking. A large stage in the foreground of three levels was built by the men and boys in the shops. The background, a beautiful outdoor scene, was painted in the art departments. This backdrop had three portals in the rear from which the board of education members,

MERLE J. ABBETT

Superintendent of Schools
Fort Wayne, Ind.

principals of the schools and graduates entered. They marched to a suitable place in the fore of the audience where they were seated. There were 1000 in all. The three orchestras, bands and choral groups were also stationed in front of the immense stage. There were 1500 in these three groups and all were led by the regular directors in charge.

The theme supported the fact of the tercentenary year in secondary education. The program was a historic pageant in episodes. The entire field was equipped with a public address system which operated with entire satisfaction even to the farthest removed auditor. The leading characters who spoke and led in each epi-

sode were carefully directed to the point of excellent dramatic presentation. The entry was one long to be remembered as well as the presentation of diplomas as the pupils passed over the stage into real life. *

It was an undertaking of huge proportion but with the interest and help of everyone it was not difficult and was a beautiful and lasting service that reflected the many interests of the school and gave each senior an opportunity to belong.

More recently the programs have been impressive masques and short dramatic efforts. These generally precede and lead up to an address by an outside speaker. For the class of 1938 the masque was entitled "The Inalienable Dignity." This was built in part around the ideas voiced by Thomas Mann, brilliant German writer, in his book "The Coming Victory of Democracy."

All Pupils Play

WILLIAM L. FINK

FOR years team play has been stressed in the gymnasiums and on the athletic fields at Reading Senior High School, Reading, Pa.; for only a comparatively short time, however, has cooperation been emphasized in such traditional activities as commencement.

A decade ago, in most schools, commencement was a formal affair planned by the principal of the school and imposed upon the graduating class, the members of which passively endured the ordeal and breathed a sigh of relief when it was ended. But conditions are rapidly changing. In many quarters today, the school staff and the members of the senior class work together to produce in commencement an affair that will be for the faculty and the class a significant educational experience and for the community a worth while event.

In 1930, the Reading Senior High School decided to vitalize its commencement. The school's immediate objectives were to produce a pageant that would provide for every member of a large graduating class an opportunity to participate in some worth while activity and that would make

the commencement program a school-wide product. The outcome was "Fair Learning's Gifts," the first of a series of graduation pageants that the school has since produced.

With the passing of the years, the objectives set down for the first pageant were expanded to include the selection of the theme by the class; the writing of the pageant as a cooperative project in senior English; the selection of participants by a joint committee of faculty and class; the designing and making of all costumes, property and scenery in the school, and the active participation of the class in rehearsing and presenting the pageant. These objectives are evident in the following procedures which marked the preparation and presentation of the school's most recent graduation pageant.

To make its contribution to a nation-wide celebration, the class of

1938, as early as June 1937, decided to use as the theme of its commencement, "We, the People," and to present a portrayal of significant events in our physical, mental and cultural growth during 150 years of American life under the federal constitution.

In September 1937, classes in senior English and United States history started to gather material in the school library, the city library, the public museum and art gallery, the Berks County Historical Society and institutions outside the city. Here was real cooperation within the school and with community agencies.

Then a senior English class divided itself into the following smaller groups, each responsible for the development of some phase of the finished product: an executive committee, a music committee, an activities committee and a committee to develop each episode.

A teacher of English directed, but the pupil groups planned, wrote and



Smiling into the camera is the pageant writing class at Reading Senior High School. By the end of the first semester the manuscript is complete, the realization of a worth while project in cooperative English composition.



Parts in Pageants

Director of Pageants
Reading, Pa.

criticized the written product and rewrote it. Occasionally, other faculty members, the director of the pageant, the director of activities, a teacher of music, the person in general charge of costumes, were called in for consultation. By the end of the first semester, the manuscript was complete, the realization of a worth while project in cooperative English composition.

A pageant committee composed of a representative from each of 21 senior homerooms and of certain faculty members now began to function. From questionnaires recording each pupil's characteristics, activities and interests, the committee selected the persons for various activities and held "tryouts" to determine each pupil's fitness to engage in the activity for which he had expressed a first or second choice.

Finally, every member of the graduating class was scheduled for chorus, orchestra, tableaux, dancing or a speaking part, or to act as usher, cus-

todian of properties and costumes or stage hand. Nearly 700 seniors were assigned duties of their own choosing in capacities where they could function most effectively.

Early in May, preparations for the pageant were in full swing. During their regular class periods, members of the orchestra were rehearsing instrumental numbers to be used in the pageant, choral groups were practicing songs, art classes were designing and painting scenery and pupils in the dramatic workshop were busy making costumes and properties. In their gymnasium classes, groups of seniors were evolving dances, drills and pantomime. The pageant was motivating the regular work of the school.

Nor must the shops be overlooked. In the print shop, the program booklet was taking form; boys in the electric shop were developing a new public address system that would

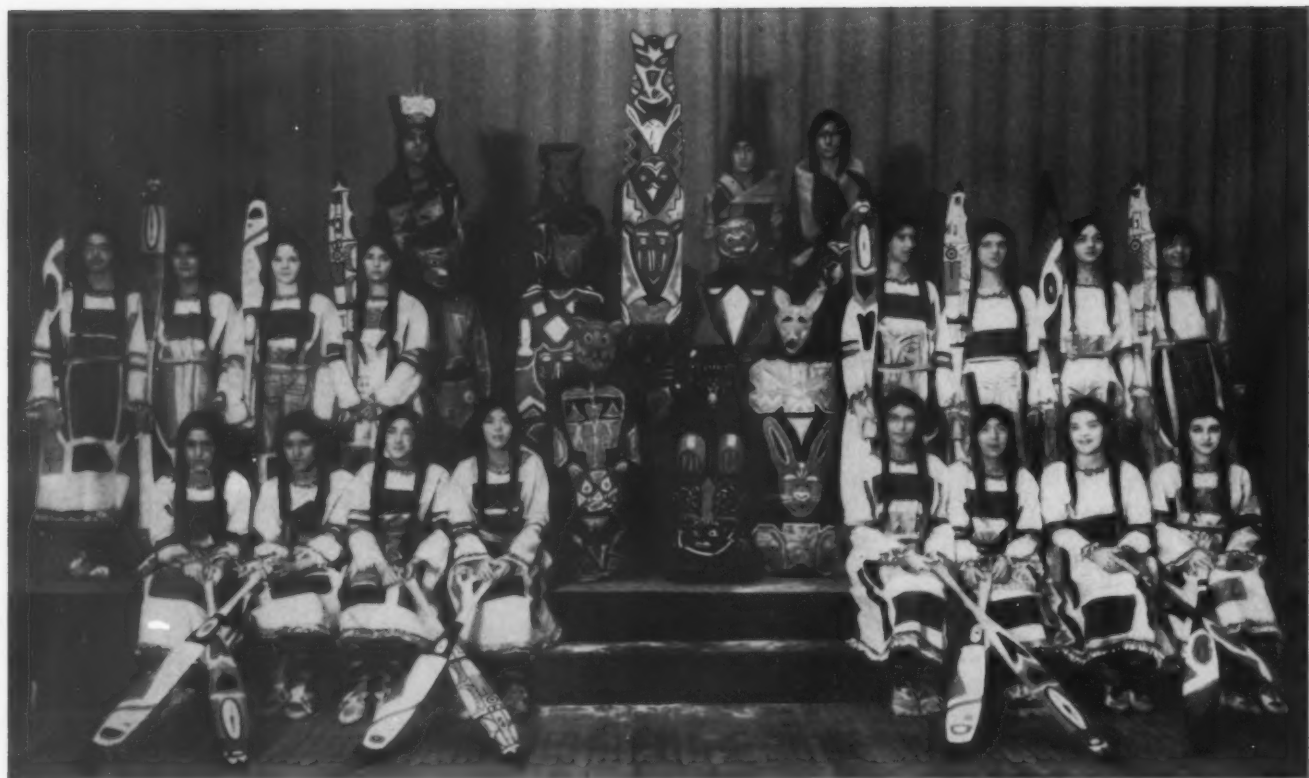
carry the spoken words distinctly to every corner of the auditorium; the workers in wood shops were constructing scenery; those in the metal shops, properties.

In June, about a week before the first presentation of the pageant, seniors were called from their regular classes to engage in rehearsals designed to coordinate the various activities into complete episodes. These rehearsals, held in the school auditorium, did not interfere with the work of the pupils of the tenth and eleventh grades. The regular work for seniors was already completed, though seniors were still reporting to class to be available for rehearsal. After two complete dress rehearsals, the pageant was ready for presentation.

"We, the People" opened with a traditional introduction during which the pageant chorus sang "God of Our Fathers" and the class president delivered the invocation. Then there followed a prologue in which a symbolic figure, representing the typical American, appeared before a screen bearing the great seal of the United States while a reader presented the Preamble to the U. S. Constitution.



Left: Scene in the dramatic workshop at Reading High. It is early May and costumes are being designed and made. Above: Pupils in the art classes have designed the scenery and now they are busy painting it and setting it up.



The pageant proper consisted of three episodes depicting, in turn, national unity, strength and achievement. Each episode was developed according to a definite pattern, which provided for a series of tableaux displayed in arches at the rear of the stage depicting historical events that led up to the main event featured in the episode; the presentation of a problem, economic, political or social; the dramatic action of the episode, which showed a well-known historical solution of the problem and, finally, an activity depicting an outcome of that solution.

In the first episode, for instance, the tableaux represented the conquering of physical frontiers; the landing of Columbus, the Pilgrims at Plymouth, life on the Mississippi, and the opening of the far West. An economic problem was presented in the brief dramatization of Shays' Rebellion and a solution to the problem, the framing of the constitution in Philadelphia in 1787. The episode closed with festivities held on Dec. 12, 1787, in celebration of Pennsylvania's ratification of the federal plan.

The principal action of the second episode was Webster's reply to Hayne in the senate of the United States in 1830; and of the third, the activities

Ready to go into their paddle dance, one of the hit numbers in "Thunder Mountain," a successful and colorful Indian pageant.

of Major Gorgas and Dr. Walter Reed in conquering disease in the tropics. The epilogue featured Pan-American progress and good will.

One of the most impressive moments of the production was the activity of the second episode, when more than 200 members of the class depicted in rhythmic pantomime the epic of Western Progress, during which exploring, logging, trapping, railroading, homesteading and mining were portrayed effectively.

Each division of the pageant provided opportunities for instrumental and choral music, tableaux, drama, dancing and pantomime: the activities in which the seniors had originally expressed an interest.

"We, the People" was produced on five successive evenings to audiences numbering more than 10,000 persons. On three of these evenings, seniors had as their guests their families and friends, for whose comfort and convenience reserved seat tickets were provided free of charge. On two evenings, tickets were sold for a nominal sum to make attendance possible for persons who might re-

ceive no invitations from seniors. The money thus received, together with a grant from the board of education, defrayed the expenses of the graduation exercises.

On the final evening, when parents were present, important scholarship awards were announced by the principal of the school, and the president of the board of education presented a diploma to the president of the senior class. The members of the class received their diplomas in their homerooms at the close of the program.

Each evening, members of the staff and members of the graduating class worked together applying make-up, getting groups to and from the stage, setting up scenery and taking care of properties, large and small. Every member of a faculty of 100 persons contributed his services in a way in which he was best fitted to serve.

Graduation for this community has become a significant event. Patrons inquire early concerning the theme of the current graduation pageant. They are truly interested in the product of their schools. School and city newspapers willingly play their part in preparing the public for the event. For a week in June, the people of a city unite to produce a cooperative commencement.

Differentiated Diplomas

EARL HUTCHINSON
High School Principal, Brewer, Me.

WHAT graduation standards shall be attained? Principal Smith looked up from the sheet of ranks he had given in the United States history class which he taught because he wished to be in close contact with teaching problems and pupils. As far as ability was concerned, this group was heterogeneous, giving a cross-section of the school.

At the head of Principal Smith's list was Edith Withers, with a 98 per cent. She was an extraordinary pupil, and the probable valedictorian of her class. However, at the bottom of the same list, with a 43 per cent, was Stacy Jones. Stacy was an excellent athlete, and his coach would now worry. Principal Smith reflected that Stacy was just not book-bright, although he was a good steady lad who had never been sent to the office for disciplinatio. To that boy, outside readings were ordeals. Mr. Smith also remembered that Stacy got 70's, the passing rank, every semester in English; and he also had an opinion that those 70's were teacher gifts to the unfortunate.

As he scanned his rank list again, he saw that the five leading pupils were the natural honor pupils of the school, and the bottom five were those whose records were spotty and who probably would need five years to meet the graduation requirements. Smith sighed in despondence at the idea that his superior teaching had not inspired these problem cases to greater effort. Perhaps his motivation had been weak, perhaps his drill not repetitious enough, perhaps his subject matter was not wisely chosen for this group. He rehashed the educational platitudes that he wished on his teachers when they presented to him the same difficulties he was now experiencing.

To flunk or not to flunk! Smith prided himself upon maintaining a progressive school and having a curriculum adapted to 50 per cent of the pupils. But in this case, he reflected, no course of study involving reading and books could be passed by those lower five pupils. He reached into

his files and drew out their permanent records. Yes, Stacy had a low I. Q., and his reading ability was below par, that of an average eighth year person, according to the norms of that particular test. Interested now, he drew up a list of the top five pupils and the lowest five. Beside each name he placed the grades they had earned in his history class, then the I. Q.'s and then the reading abilities. The results looked something like this:

Top List of Pupils			
Name	History Score	I. Q.	Reading Grade
E. W.	98	120	All these col-
D. S.	98	121	lege fresh-
B. P.	97	112	men or bet-
K. L.	96	112	ter.
M. B.	95	110	

Lowest Five Pupils Listed			
Name	History Score	I. Q.	Reading Grade
A. D.	60	90	9.2
G. M.	52	81	9.1
P. W.	51	78	9.3
M. A.	48	73	8.5
S. J.	43	71	8.1

And these were all seniors! Principal Smith chewed his pencil as he ruminated. "It's not fair to expect the same results from Stacy as from Edith. The school is too small for segregated divisions doing different work. An achievement quotient might be the answer."

As Smith was not sure in his own mind as to the reliability of achievement quotients, he hesitated. Their use would lead to some embarrassing questions from parents and pupils. He had once talked to two friendly pupils about such a procedure. (Smith had learned through experience to try reactions upon one or two typical pupils before he attempted something new.) These pupils, both bright, had voiced a horror of a poor pupil receiving the same (apparent) rank as they. That method was out.

He had thought of eliminating rankings altogether. Then he remembered a faculty meeting several years before when he had broached such a plan. Teachers were unanimous in declaring that grades or ranks were an important motivating force and that they had been entrenched too long to be thrown out. Besides, there were the difficulties of scholastic eligibility rules and college demands to be considered.

Coming back to Stacy, Principal Smith guessed he had better inform the boy of the sad news now that he would need another year to meet the graduation requirements. Still he hesitated. Stacy would probably not come back another year. If he did graduate, the best he would do would be to get a blind alley job about town. Why not graduate him? Well, it would lower the standards of the school. "Hm, that's out, but why not give him a special diploma?" The thought lightened his weary groping, and he hunted for a half an hour for that magazine in which he had read something about differentiated diplomas.

Finding it, he studied it intently; not much help there, but the article proved that the plan had been used successfully in other schools. As he muddled on the matter, he gradually drew up the plan, with arguments for and against it. On such an important matter, he had to inform the local school board and make sure of its approval. That procedure meant logical reasoning. When he had finished, he had this list of advantages in favor of the differentiated type of diploma:

1. They encourage the pupil to remain in school until four years have passed, for he is sure of some official document.
2. They maintain the standard of the school, for teachers will not feel compelled to give 70's from sympathy

(Continued on next page)

Defining Commencement Trends

VIERLING KERSEY

Superintendent of Schools, Los Angeles, Calif.

THE modernization of the American program of secondary education is no more clearly observable than in the improvement of the commencement program from the original, formal, inflexible, standard commencement procedure to the present informal, graduate-centered commencement program.

Commencement is no longer an activity that merely takes place at a stated occasion and is over in a few hours. Commencement with the experiences it involves for the benefit of the youth concerned is a long-term relationship. In plans now under way in the city of Los Angeles for the distinct modernization of high school commencement activities, certain specific phases of responsibility are given consideration. The trends are inclusive of the following:

1. Commencement consciousness should prevail throughout the entire final semester of the senior year.

2. Since commencement implies readiness to carry on, it is essential that the graduate be prepared with a program of planned activities as the result of a semester of intensive guidance for immediate life or future school relationships following graduation.

3. Commencement implies the attainment of maturity and the development of various abilities and knowledges other than those designed for attainment in the curriculum pursuits of the pupils. It is now an implied requirement that graduation from high school signifies that the pupil knows how to typewrite, for what future study or employment opportunities, much less life participation, opens wide except for those who know how to typewrite! Graduation implies that pupils are able to plan a constructive recreation program. Likewise, high school graduation might well imply that the graduate knows how to swim, how to apply for a job and how to enter community life.

4. Commencement is a period during which there is about to take

place a transition between school life of attention, care, direction and guidance, and future life, which is less protected and less guarded by others than the graduate. The commencement season, therefore, involves experiences and lessons of a clinching nature in relationship to the capacity of the graduate to meet the next step.

5. Commencement exercises, with such a point of view as this prevailing, must be simple, must be graduate centered, must give the graduate every opportunity to indicate a readiness to meet a new stewardship and must indicate to those assembled to honor the occasion that the graduate is worthy of a continuance of faith, further guidance and attention.

Commencement exercises should be brief and should be balanced as between music and spoken numbers. The originality, spontaneity and creative talents of graduates should be presented. Wholesome, tolerant and considerate leadership must constantly surround the individual graduate as well as the group of graduates during final days of the senior year. Community participation in the commencement season should be evidenced by a readiness to receive, to encourage and to cooperate with the graduates. Spoken presentations on the program may well take a variety of forms, such as a panel discussion, an original oration, a dramatization, the exemplifications of a school experience or any of many other possible and desirable presentations.

Thus we shall find that graduation and its characteristics will be a good measure of the characteristics of the school's basic educational program.

Differentiated Diplomas

(Continued from preceding page)

or the desire to rid the school of a poor pupil.

3. They seem fairer to pupils of varying book ability.

4. Pupils who receive a limited certificate can, if they wish, attend for a fifth year and obtain credits and standards necessary for a standard diploma.

5. These two types of diplomas state more accurately the accomplishments of a pupil in school.

Principal Smith pondered the disadvantages. The only one he could think of was the lowering of the academic standard for the poorer pupil. Still, he could and would raise it for the others. More credits would be required of the brighter ones for their diplomas. As time went on, the people of his community would realize that one needed the standard diploma in order to enter most institutions of higher learning.

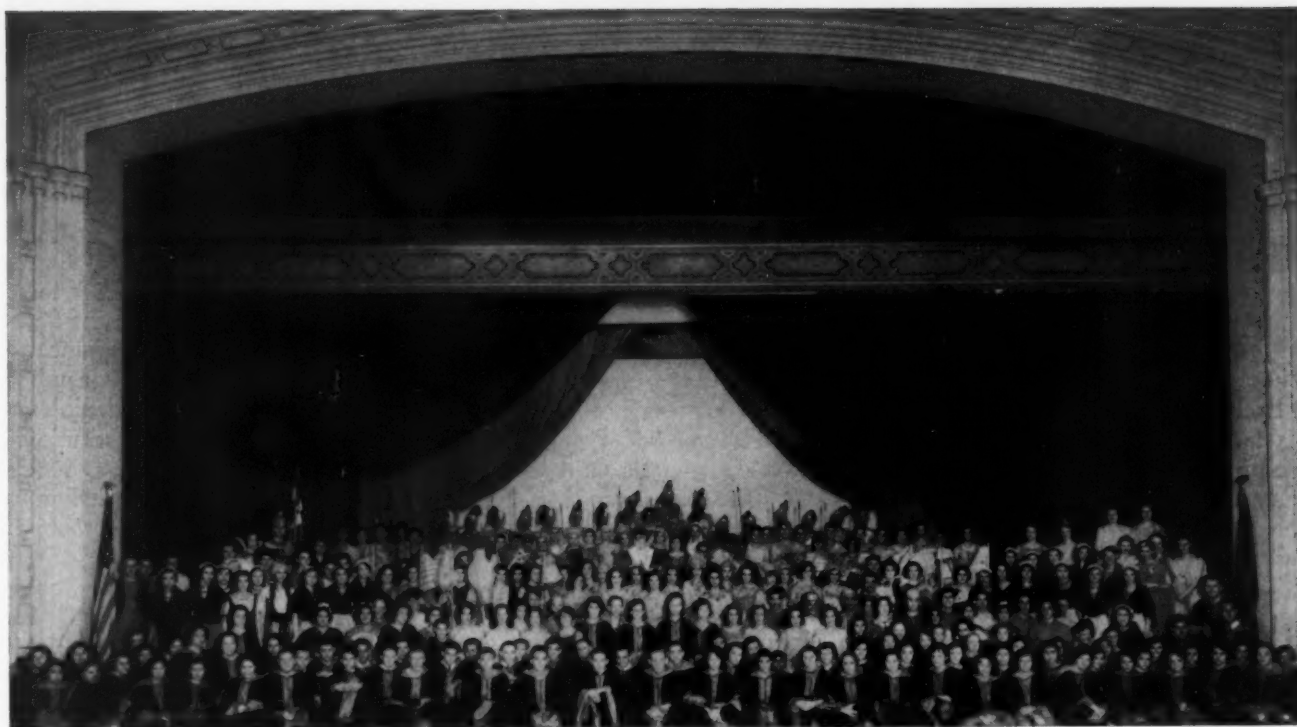
Yes, it seemed like a good idea. Smith then outlined the requisites for each diploma.

The requirements of a Limited Certificate of Graduation shall be:

- (1) regular attendance for four years; (2) the carrying of four subjects each year in an approved program, and (3) satisfactory evidence of effort as determined by objective reading ability and book-intelligence tests. This diploma will certify just these points and state that the pupil has completed only a part of the full requirements of the course. Also to be included with the certificate shall be a certificate of school credits in which the pupil has done satisfactory work. Thus, this diploma will be worth only its face value.

The requirements of a Standard Certificate of Graduation shall be the satisfactory completion of 18 units of work, in an approved program, of which four must be in English and one in mathematics.

When the school board accepted Principal Smith's innovation, although not certain in his own mind as to its ultimate outcome, he said to himself and to others: "At least we are trying to do something to make the school better adapted to the average pupil."



Staging a Good Show

WHAT will make a good show? When thousands of parents and friends, many of whom are having their only direct contact with the school, get together on a warm May night in a building filled to the last seat, what can the school do to hold their interest and send them away pleased?

These are questions that the principal of the Senior High School, Springfield, Mo., asks of the head of the speech and dramatics department when the preparation for commencement exercises is getting under way. He means just that.

This type of program does not result in a meaningless presentation; pupils gain some information and share it with their parents in an entertaining and somewhat spectacular way, resulting in an effective dramatic production. The dramatics department usually builds the commencement around outstanding personalities of the class, good orators and beautiful girls. The tableau demonstrations hold the interest of the audience as the teacher

**HELEN A. JOHNSON
and MARY S. CRISS**

**Teachers of Speech and English
Senior High School, Springfield, Mo.**

holds the attention of the class by blackboard activity.

Because the graduating class numbers more than 500, it is necessary to rent the Shrine Mosque auditorium, which seats 5000. The size of the room makes it necessary for all speakers to use an amplifier. To some extent that has determined the nature of the commencement programs for the last fourteen years. The pupils' increased interest in world affairs has also determined the subject matter of the speakers.

But first let us investigate some of the activities preceding the actual presentation of the program. The principal believes the commencement exercises to be of sufficient importance to give time and thought to them early in the year. In January the committee is announced. This

includes half a dozen faculty members and at least as many pupil members. The chairman is often one of the newer additions to the faculty, thus bringing new ideas and active leadership, as she or he will have pride in doing a first-class piece of work. Three members have remained on the commencement committee for several years: the head of the speech and dramatics department, the head of the art department, and a member of the English department for composition.

The chairman assigns members to various subcommittees. These will be indicated in relation to the 1938 commencement. The committee is responsible for the choice of speakers and musical numbers, the plan of the program and all the details until the program becomes history.

Speeches are usually from five to eight minutes in length and speakers are chosen from the highest tenth of the class, preference being given to those who speak well. A date for tryouts is announced and all in that tenth who wish and who are not

exempt because of other honors appear before the subcommittee and read a short selection of their own choosing. The class president is always on the program as the last speaker, combining his talk with the acceptance of diplomas. Musical numbers are usually chosen after consultation with the school music department.

Money needed for special purposes is provided by the rental of the school's caps and gowns to seniors.

Each speaker is allowed to select his faculty adviser for assistance in the preparation of his speech and for early oral work. The head of the speech and dramatics department assumes responsibility the last week for general effectiveness and for polishing speeches and tableaux.

Classroom Activities Shown

In 1931 the theme was "The Student at Work." It was written by four girls, presented by three readers and accompanied by tableaux. Following the first reader, these tableaux were presented, being spotlighted successively: "Getting Out the School Magazine" by the English department; "A Meeting of the Student Council" by the history department, and "Mathematics in Practice" by that department.

Following the second reader, two tableaux were presented: "The Student's Debt to the Languages" and "Adjustment to a Scientific Age." Four tableaux were used after the third reader. These included "Interpretative Dances," "Learning Aids to Business," "Making a Home" and "A Cross-Section of Industrial Arts."

In 1934 the theme was "Youth and the Future," embodying these speeches: "Friends in Government," "Family Life Today," "The Outlook for Industry," "The Responsibility for the Welfare of Society," "The Problems of Leisure Time" and "Education, the Solution."

In 1935 three speakers only were used. They discussed "Secondary Education of the United States," "The History of Secondary Education in Springfield" and "The School of the Future." During each of these talks the stage was dark and the replica of an early school building, constructed by the industrial arts department, was shown, lighted from

the interior. As the high school was built in sections, the replica of that building was lighted a section at a time. The last building, the school of the future, was spotlighted.

"The Report on Social Studies" was the basis of the talks in 1936. A panel discussion on this topic was used: "The Distribution of Wealth and Income in Relation to Economic Progress." A chairman presided, introducing the four subjects discussed: "America's Capacity to Produce," "America's Capacity to Consume," "The Formation of Capital," "Income and Economic Progress." In looking back over the commencements, this program was felt to be least successful. Although charts to illustrate the talks were thrown on the screen, using colors in the graphs, the subjects proved difficult for the pupils to put into such a form that the audience followed with interest.

The Horace Mann centennial was featured in 1937. A statue of Horace Mann, a boy costumed in brown cambric covered with dark brown grease paint, was used at the beginning and end of the exercises. In the first part the pupils, grouped as in a campus scene, were at the base of the statue. Later the seniors were all grouped at the base, some standing, some kneeling, raising their diplomas in a pledge to carry on the ideals presented by Horace Mann.

In preparation for the 1938 program, the chairman appointed a committee on dramatics and speakers, a committee on artistic arrangement and a committee on source material, programs, ushers and music. Members were also assigned to such responsibilities as furniture, make-up and carpentry construction. The chairman of source material prepared a bibliography of a dozen available biographies of personalities in the constitution and of some 60 volumes pertaining to the constitution.

A Howard Chandler Christie painting became the pattern for the statue, the Spirit of the Constitution, used in the opening and closing portions of the exercises. A wooden base consisting of steps made in sections was constructed in the industrial department.

"The Spirit of the Constitution," a fair-haired girl, wore a white robe,

silver in her hair and held a torch. Her robe was touched with silver, and blue lights were thrown on the figure in the first scene. At either side in scout uniform stood a standard bearer holding a large flag.

At the close of the president's speech, all seniors were grouped at the foot of the statue, the steps forming different levels upon which some stood while others knelt on the floor. At the last a pledge of allegiance to the flag was recited in unison while each pupil raised his rolled diploma to "The Spirit of the Constitution." It made an effective picture and such a closing that we feel we shall continue to use the idea. It proved a thrill for the audience, an excellent public relations gesture and, we believe, created a needed spirit of patriotism. It might be added here that patriotic groups have been given special invitations to the program.

The intermediate tableau, that of "The Constitutional Convention," was patterned after a picture. During the talk, "Personalities of the Constitution," each man was spotlighted as he was named. Variety was added to this program by the use of costumes rented from a local dealer and the gray caps and gowns of the seniors. Timing of situations to produce the most effective result is important.

Technic of Diploma Giving

These are some points in giving each of the 500 pupils his own diploma on the stage as his name is called. At a rehearsal pupils are seated in rows, 16 to a row in two sections. They write their names on a page numbered left section or right, as the case may be, row 1, and numbered from 1 to 16. A captain is appointed for each row to check the row for correct seating and absentees. Diplomas are filed in racks made to accommodate 16 diplomas to a row and are placed in the order in which the pupils are seated; e.g. row 1, left section on bottom, since this section will receive its diplomas last. Row 2 right section is next. Rows pass by diploma racks from alternate sections, working from the back, beginning with the right section, if there are an equal number of rows in each section. The last one on the stage is the class president.

Negro Pupils Plan Programs

A. H. PARKER

High School Principal
Birmingham, Ala.

THE Industrial High School is the only four year high school for Negroes in the Birmingham system. Until 1937, when another secondary school was established, it was the largest high school in the world for Negroes. In the thirty-nine years of its existence, it has not yet had a stereotyped commencement program.

An effort has been made to present programs that are democratic to the extent that any pupil who has a worth-while contribution to make may participate. In the class of 1904, for example, there were 15 graduates. Of this number nine took part in the commencement program.

All programs are placed in the hands of the pupils. They select the theme and, with the guidance of a teacher, prepare the program. The president of the class acts as master of ceremonies. After the pupils have rendered their part of the program, he introduces the superintendent of schools and any other school official who may be present.

The school is located in an industrial center, with 20 per cent of its work being done in the field of industrial education, yet it was necessary to sell this industrial policy to the public. This was done through the commencement programs. The commencement exercises for June 1926 had as a theme "Character Education Through Work." The graduates, through demonstrations, created actual shop situations before the audience, and this helped to convince the public of the fact that work has a place in education.

If one phase of school work could be successfully sold through these exercises, then it follows logically that the public could be made to appreciate other phases through the same medium.

Keen opposition was felt when Negro history was made a part of the curriculum, but through programs based on the history of the Negro in America and his contributions to the fields of literature, music, art and science, the people of Birmingham

The public is sold on the modern school curriculum and on the needs of the school community through the annual pupil-planned commencements at this Birmingham high school

were made to appreciate the pattern the Negro has woven into the fabric that is America. The pupils in the class of June 1935 wrote a pageant, "The Spirit of the Negro," in which the entire class of 235 students participated.

The singing of the Negro spirituals by our pupils has brought national fame and the pupils have given coast-to-coast broadcasts of this typical American music. It is to be expected, then, that music has played a large part in building commencement programs. For June 1934, the theme was "Some Achievements of the American Negro"; a whole section of the program was devoted to Negro music. Various types of music, including the "St. Louis Blues," were sung by the class, and a critical analysis was given of each type.

No extracurricular activity appeals to pupils more than dramatics. The attention of the community has been focused on drama by including on the programs one act plays. Among the plays given are "Finger of God" by Wilde and "Ambition" by Kavanaugh. In order to show the phases of dramatics taught in the school, the program for January 1932 was made up of a pageant, a one act play and, believe it or not, a miniature black-face minstrel show.

Commencement programs can play a large part in educating the

public on subjects of vital importance. To render this type of service, the pupils make surveys and report their findings. The program for June 1933 was typical of the survey type. Members of the class made a study of the housing conditions in the 24 blocks surrounding the school. The program based on this survey went a long way in teaching the people the need of better housing.

The program for the January class of 1934 was built from a survey of unemployment conditions among Negroes. Perhaps the most interesting program of the survey type was the one for January 1936. The pupils of the class contacted the 1728 persons in parts of the United States who were members of the school's first 25 graduating classes and on the basis of their findings presented an interesting project.

The school, a show place of the city, attracts many famous personages. For May 1938, the theme was the story of Industrial High School from 1924 to 1938. One graduate gave the public a record of the hundreds of visitors that the school had received during the last fourteen years. Another feature of the program was a memorial speech for the teachers from the school who have died in service.

In a subtle manner, the philosophy of the school was presented. Each participant related incidents concerning one element of our school spirit. The pupil who talked on a sense of humor related many of the jokes that he had heard in the classroom, from the auditorium stage and on the playground.

If the favorable comments made on the programs by the superintendent and the board of education, if the overflow crowds that fight for standing room on commencement night and if the interest of the graduates in the programs are criteria of success, then we feel that we have found the secret, a secret that lies in pupil planning, pupil directing and pupil participation:

Berkeley Features Pupil Talent

H. H. GLESSNER

Principal, Berkeley High School, Berkeley, Calif.

THE graduation program at Berkeley High School, Berkeley, Calif., is confined almost exclusively to talent within the student body. This school, which has an enrollment of 2700, is the only senior high school in Berkeley. A class is graduated at the end of each semester. So large is the attendance at these graduating exercises (the number passed 6000 last June) that the high school auditorium cannot accommodate the crowds. Consequently, the programs are held in the men's gymnasium of the University of California.

About the middle of each semester a committee composed of the vice principal, the dean of girls, the dean of boys, the head of the music department of the high school and the teacher of public speaking meets to discuss the nature of the program. Each individual is assigned duties, and instructions are given him on carrying out his part of the program.

For example, the dean of boys is assigned the duty of providing doorkeepers, ushers and taking care of the public. He also is given the duty of seeing that the graduates are arranged in alphabetical order for the procession.

To the dean of girls is delegated the responsibility of measuring each pupil and providing pupils with caps and gowns. These caps and gowns are owned by the Berkeley High School student body. She likewise is responsible for preparing the program, seeing that the invitations and programs are printed and that the invitations are distributed among the members of the class.

The vice principal, who is head counselor, directs the secretary of the school in listing graduates alphabetically and in getting the diplomas ready for distribution.

The public speaking teacher (Berkeley High School prides itself on having an outstanding public speaking department) discusses with the members of the graduating class the

topic to be discussed by the representatives chosen as the pupil speakers. These speakers are selected on a competitive basis and the selection is made by a committee of faculty members at a public tryout.

After these speakers (usually four in number) have been selected, the topic in question is divided into as many parts as there are speakers and developed in the class discussions and written by the pupils themselves. When the individual speeches have been written, they are memorized and those pupils are trained by the public speaking teacher for delivery. The president of the senior class, who has been elected by the pupils themselves, gives an introductory talk and serves as chairman of these pupil speakers. The student body president delivers his farewell address during the latter part of the program.

A guest speaker of the evening, whose address usually ranges from fifteen to twenty minutes in length, is selected on the basis of prominence in the community, as well as ability to deliver a message in an interesting manner and one that has value for the graduates. The diplomas are then distributed by the principal of the school as the members of the class march across the stage in alphabetical order. The names of the pupils as they present themselves for their diplomas are announced by the class president.

The setting for the graduation, the men's gymnasium, is in the form of an arena. The graduating class is seated on the main floor and the audience on the sides arranged for them, with the orchestra in front of the stage, the A Cappella choir and the pupil choruses on the balcony directly back of the speaker's platform. The art department is responsible for the hall decorations. The program begins at 8 o'clock and usually ends at 9:45 o'clock, being timed accurately. On the day of graduation, a rehearsal is staged and the entire program is rehearsed.



What is commencement without music

Emphasis on

L. D. HASKEW

GRADUATION programs at the Monroe High School, Monroe, Ga., for the last five years have evolved out of two convictions. In the first place, the administration has been convinced that graduation exercises should render a real service to the community. The senior classes each year have been enthusiastic about the service aspect of their programs, and the examination of proposed plans in the light of their service value has improved the quality of the programs presented.

In the second place, it also has been thought that graduation programs should be of such nature that their preparation involves a valuable and permanent learning activity on the part of pupils preparing the program. Along with this principle, the idea of having as many pupils as possible participate both in the preparation and the staging of the program has been developed.

The methods of presentation have ranged from more or less formal speech-making through pageantry. There has been a decided emphasis upon interest-arousing and interest-holding types of activities, with the result that many novel ideas have been produced. General procedure for preparing the programs is as follows:

Early in the year a committee of seniors is appointed to suggest themes for the graduation exercises to the class as a whole. A faculty member then works with this committee to



by the school band or orchestra or both!

Service Value

Superintendent
Monroe, Ga.

develop two or three themes, all of these being measured by criteria dealing with such things as the service value of the project, the availability of material, the provision for wide participation and the current interest of the topic.

Some three or four themes are selected and are presented in detail to the class by the committee. The class chooses the theme that it would like to use and a committee is appointed definitely to work out the program.

The entire class gathers information, raises criticisms and passes final judgment upon all proposals. The information collected is then worked up by the steering committee into a presentation. If the class approves this presentation, it selects those who are to participate in the program, usually by designating a special casting committee. There are no restrictions, scholastic or otherwise, as to participation in the final presentation.

All departments of the school are called upon to contribute to the final production. The music department advises on music, the industrial arts department helps with construction, the science department may aid with such things as movies and radio, the dramatic department takes charge of the staging.

Preparation of such a program as this is a three months' project, but the results, both in the growth of the pupils and in the appreciation of the public, will justify this effort.

"Demonstrations" at Piney Woods

LAURENCE C. JONES

Principal, Country Life School

COMMENCEMENT exercises at Piney Woods Country Life School, Piney Woods, Miss., open with the singing of a spiritual by the entire student body. This is followed by the chaplain's invocation. Immediately after, the industrial demonstrations begin. It is the pupils who are being graduated. Therefore, the program is theirs.

All classes use the same general plan, but the 1937 program will serve as an example. The opening demonstration was entitled "Being Attractive." So slight a thing as making a "Mother Hubbard" dress from a couple of fertilizer sacks is of importance to these rural Negroes and was effectively done on the platform. As the type of garment being made was very elementary, it took only a short time to finish it. While the graduate worked, she explained each step she performed, how little the dress would cost and how valuable this training in using whatever was at hand would be to her when she returned to her backwoods community. In this way, the time passed quickly and no one noticed that twenty-five minutes had been consumed.

Next came "Economy in the Home," an exhibition of how sugar and fertilizer sacks can be utilized to make bedspreads and curtains.

The "Value of a Home Garden" was explained in detail by a farm boy. The average Southerner, either Negro or poor white, eats a monotonous diet. Often cornbread, greens, sweet potatoes and cow peas are the staples, yet Dixie soil will grow beans, English peas, cabbage, Irish potatoes, lettuce and carrots. So here a young man who had learned the way to do a lot with a little stood on the stage and showed his people how deeply to plant different seeds.

The "garden" was a wooden box, 2 by 3 feet, planted with seeds, young plants and mature plants. For the demonstration, he had chosen carrots, although he spoke briefly of the

other plants. After discussing each phase of growth, he called attention to a display of home canned fruit at the rear of the platform.

"Culinary Art" consisted of correct methods of cooking black-eyed peas, of making boiled coffee in a sauce pan and of baking fluffy, light cornbread. Since these are the commonest articles of food in many homes, it is deplorable that so many women are ignorant of how to prepare them properly.

This school has won for itself a name as the home of lovely woven products. The rugs and table runners are beautiful, useful accessories to gracious living and are sold at minimum cost. One girl on the commencement program demonstrated "Weaving Threads." The stage was set with a hand loom on which was an 18 by 36 inch rag rug, nearly completed. While the graduate finished the last ten or twelve rows, she told how weaving is done and gave a short history of the art. When the final row was finished, the rug was removed from the loom and it was explained that this process is the exact reverse of the setting up.

Many people actually believe that colored folk cannot think in an organized, logical manner. Some concede that typing is all right for them, as that requires a degree of manual dexterity, but that shorthand, which requires a bit of mental alertness, is not so good, and that filing on a large scale is definitely beyond the Negro.

The high school valedictorian took a business letter in shorthand and typed it; then she duplicated it by means of a hectograph so that copies could be distributed among the spectators. Her work was neat, speedy and accurate. This demonstration was concluded with a short filing drill.

All the commencement programs are carried out in the same general manner, including the junior college division.

Public Demands an Encore

HAROLD STEELE

Superintendent of Schools, Jackson, Mich.

SOME excellent high schools are yearly missing ideal opportunities for the final development of their graduates by clinging to the old-fashioned commencement program. At the same time they are passing by a valuable chance to strengthen friendly school and community relationships.

Such schools should be warned, however, that changing to a modern commencement may lead to a demand that the number of commencements to be held each year be doubled. If the program is truly good, this doubles the benefits. Even so, commencement costs may possibly be lowered.

At least this has been the experience of the public schools at Jackson, Mich. For many years the Jackson board of education had conducted the typical old-style commencement program. The best public speaker available was hired at a fair price to deliver a forty minute address which was heralded as the chief feature of the program. Everyone concerned seemed satisfied.

However, in June 1934 an experiment was tried. The usual imported speaker was eliminated. In his place a new type of program designed and executed by the graduates appeared. They and their sponsors originated this program. They wrote the lines. They designed the costumes. They painted the scenery. They furnished the music. Here was cooperative, creative effort of the highest type. Every class member had an opportunity to contribute something toward the success of the evening.

Everyone concerned seemed pleased but many were not satisfied. The trouble was that, although the large auditorium was packed to capacity, it would not hold enough people. The only solution seemed to be two commencements on successive nights, instead of one commencement. For several years now double commencements have been held each June and in time they will be required at the midyear also.

With the double program diplomas are given out to one half of the graduates each night. The same program is repeated but with a different cast. In consequence all concerned are not only satisfied but keenly enthusiastic.

Such a program may be conducted so as to have decided values for the pupils, the general public and the school system. For the pupils supreme opportunities are presented to develop individual talent while working for the common good. For the public it affords an opportunity for school visitation. For the school it has unusual value as part of a public relations program.

Jackson's experience indicates that, if the new program is to be entirely successful, careful attention should be given to certain details. The following are perhaps the most important:

1. The program should be dramatic, dynamic, spectacular. It should have artistic appeal both to the eye

and to the ear. Color and form and rhythm are important. Pageantry should play its part.

2. The program should evolve around some central theme, such as "Demonstrations of Classroom Work," "The Story of the Public Schools," "The Value of Learning," "The School Looks at the Community," "The Community Looks at the Schools," "The Road to Freedom," "The History of the Public Schools."

3. The program should be short. Many short, fast-changing features or scenes often take well. It is best to have few or no waits between acts, with the program ended by 9:30 p.m. while the audience is still eager for more.

4. Success depends upon having highly competent and enthusiastic teachers to stimulate, advise and guide the graduates in their preparation.

5. Such a program requires time and thought and effort. Therefore, as soon as one commencement program is ended, plans for the next year's exercises should be begun.

What Should the Diploma Say?

FRANCIS T. SPAULDING

Harvard Graduate School of Education

ASSUMING that the diploma is to be retained, what should it say and how should it say it?

First, it should offer an unequivocal judgment as to the extent to which the school has achieved its fundamental aims in the case of the pupil to whom the diploma is given, irrespective of the details of what the pupil has done. These aims have to do with at least a twofold outcome, the preparation of the pupil to become an effective citizen and his preparation either for entrance into a vocation or for further study in another educational institution. To both these matters the diploma should give explicit attention.

Second, it should base the judgment that it sets forth not on the cer-

tificate of a clerk that the pupil's passing marks add up to some arbitrary total but on the willingness of the school's faculty to stake its professional reputation on the pupil's success in out-of-school life.

The high school diploma should be, in other words, no mere transcript of credits but an open letter of recommendation, a letter such as that which a straightforward teacher or principal will even now write to an employer who is wise enough to ask for such a letter, or a discriminating recommendation of the sort which schools jealous of their reputations send to college officers who inquire about individual pupils.*

*From "Graduation Without Equivocation," Harvard Teachers' Record.

How a Principal Is Selected

CHARLES E. WINGO

Principal, Community High School, Argo, Ill.

A STUDY of the development of methods in selecting the high school principal in the United States carries us back to the first high school established in the United States, the English Classical School of Boston, in 1821, which became the English High School three years later. Then, and for many succeeding years, the principal was selected primarily upon his qualifications as an academic arm-chair student of Greek and Latin and as a strong disciplinarian. He was more generally of the church-leader type. Historically the ancestors of the high school principal were scholarly heads of the academy or of the Latin school.

With the development of free high schools, state legislatures began indirectly to eliminate the arm-chair principals by establishing educational requirements and qualifications. At present these legal requirements define professional limits within which the delegates of the local community are to be guided in selecting and employing the principal.

There are 102 counties in the state of Illinois. One or more community or township high schools exist in 101 of these counties. For a state-wide sampling, one school in each county, organized on the foregoing basis, was selected for this study. The secretaries of the boards of education were chosen as the representatives of the school, as there is no intermediate superintendent to recommend the election of a high school principal.

The board of education is responsible for the selection and employment of the principal. The secretary, by nature of his office, takes leadership in this selection. A questionnaire was mailed to each secretary of the 101 schools and the returns amounted to 53.46 per cent. The size of the schools from the standpoint of pupil enrollment varied from 52 to 4042.

Thirty city superintendents in cities ranging from 25,000 to 200,000 population in the five states (Minnesota, Indiana, Ohio, Pennsylvania and New York) were sent a ques-

tionnaire similar to that sent to the secretaries of the Illinois high schools. These cities of the five states were selected to give a wide range of comparative thought on the part of the superintendents and of the Illinois secretaries. Sixty per cent of the superintendents returned the questionnaire.

So important is a personal interview before employing the principal that all the secretaries and superintendents required it. With the letter of application as the ambassador, the personal interview becomes the good will conference through which definite relations are established leading to the actual signing of a work relation contract.

It is considered necessary by both the secretaries and the superintend-

perintendents on items of importance in a written application as shown in table 1.

The secretaries of the three largest schools and the superintendents preferred the blank form of application. Secretaries of the larger schools and the superintendents are more businesslike and systematic in preserving school records. The blank form lends itself to condensed information for filing and brief scanning of qualifications.

An extremely high rank difference correlation of .95 was found in the sources to be consulted by secretaries and superintendents when selecting a principal. This correlation represents a marked agreement among secretaries and superintendents as to the sources that they consult. The

Table 1—Correlation of the Ratings of School Board Secretaries and of City Superintendents on Items of Importance in a Written Application for the Position of High School Principal

Points Considered	Secy.	Supt.	D	D ²
Experience	1	1	0	0
Institutions attended	6	2	4	16
Academic degrees	3	3	0	0
Hours of education	2	4	2	4
Professional affiliations	15	14	1	1
Major teaching subjects	10	7	3	9
Attached transcript of credit	5	6	1	1
Photographs	4	5	1	1
References	17	10	3	9
Religion	18	8	10	100
Fraternal affiliations	9	13	4	16
Health	11	9	2	4
Stature	12	12	0	0
Married or single	16	11	5	25
Nationality	13	15	2	4
Salary expected	17	16	1	1
Present salary	14	17	3	9
When available	8	18	10	100

Formula used: $1 - \left(\frac{6 \times \text{the sum of } D^2}{N(N^2 - 1)} \right)$

N = 18

The sum of D² = 300

$1 - \left(\frac{6 \times 300}{18(18^2 - 1)} \right) = 1 - \left(\frac{300}{3 \times 323} \right) = 1 - \left(\frac{300}{969} \right) = 1 - .21 \div .79, \text{Correlation.}$

ents to have a written application with a photograph attached. This is required in advance of a personal interview. There is a high rank difference correlation of .79 between the ratings of secretaries and of su-

secretaries were divided in their opinions concerning the relative value of an all-state rating committee in selecting a principal. A slight percentage were in favor of such a committee. The superintendents

were unanimously opposed to the committee.

The superintendents, being educational experts, are better able to judge the principal's qualifications and are continually in touch with desirable candidates, while the secretaries, for the most part, are laymen having their interest more or less diverted by demands of business and professional enterprises, thereby rendering them less capable in making selections of principals. The superintendents probably visualize how inefficient an all-state rating committee might be, while the secretaries, who are of the business realm, rely on expert advice. Perhaps the superintendents foresee paternalism, politics, graft and domination of educational institutions in such a committee.

Table 2 gives data relative to the sources consulted by secretaries and

who are in the school system as principals.

Secretaries from the smallest group of schools are equally divided on requiring a Ph.D. degree for principals. It probably is natural for those who are removed from colleges and universities to place more emphasis on degrees as emblems of honor. Presumably the smaller school secretaries place more competence, honor and prestige on the Ph.D. degree for the principals than do the larger communities, which are located closer to greater educational institutions.

Many principals spend too much time in activities outside the school. By so doing, the school suffers in lack of supervision of: (1) the faculty, (2) pupil personnel and activities, (3) the curriculum and (4) general maintenance.

If the faculty has constant opportunity to consult the principal, its

narrow view of educational administrative problems.

The efficiency, self-reliance and initiative of a faculty become stifled under an oversupervising principal. The present day curriculum requires a democratic coordination of administration and faculty and pupil consideration. This cannot be effectively accomplished under a despotic administrator.

It may be seen that the principal who strikes a happy medium between the demands of his school and outside functions becomes a man of affairs in the community. He is the administrator who uses these outside activities as a fitting influence to fulfill more efficiently his obligations in administering the affairs of the school.

The sum of the percentages of secretaries in favor of items of professional affiliations, civic activities and outside activities bears a ratio of 1.2 to the sum of those not in favor; for the superintendents the ratio is 1.7. Approximately one-half of the secretaries preferred a high school principal whose activities are confined to the community. The superintendents were unanimous in their opinions that these activities should not be confined to the community.

It is not uncommon for secretaries and superintendents to be besieged by fathers, mothers, city and county officials and faculty members of colleges who wish them to employ a friend for the principalship. There was general agreement among the secretaries and superintendents that family, political and religious connections do not have a great bearing upon the selection of the principal. Probably superintendents considered politics as something that cannot be avoided, since they did not answer the question: "Do you think politics plays too great a part in the selection of most high school principals?"

There is some disagreement among the secretaries and superintendents as to the outstanding good points of a principal. The secretaries consider disciplinary ability an outstanding qualification; the superintendents consider administrative and supervisory ability important.*

*Abstract of thesis submitted by Charles E. Wingo to Cornell University, 1937.

Table 2—Correlation of the Ratings of School Board Secretaries and City Superintendents on Sources to Be Consulted in Selecting a High School Principal

Sources	Secy.	Supt.	D	D ²
County superintendent's office	2	1	1	1
State superintendent's office	3	3.5	0.50	0.25
State accrediting office	4	3.5	0.50	0.25
Regional accrediting office	6	6	0	0
Teachers' agency	7	6	1	1
College placement bureau	5	6	1	1
Personal acquaintances	8	8	0	0
Other sources	1	2	1	1

Formula used: $1 - \left(\frac{6 \times \text{the sum of } D^2}{N(N^2 - 1)} \right)$

N = 8

The sum of D² = 4.5

$1 - \left(\frac{6 \times 4.5}{8(8^2 - 1)} \right) = 1 - \left(\frac{27}{504} \right) = 1 - .05 = .95$, Correlation.

superintendents when selecting a high school principal.

Ways of compensating an all-state rating committee suggested by the secretaries are as follows: (1) by appropriation by the state legislature; (2) by charging a placement fee to the applicant; (3) by an applicant's membership fee; (4) by the state department educational fund; (5) by the state, through civil service, and (6) by the high school visitors' office.

The secretaries and superintendents both prefer experience to academic degrees by a 3 to 1 ratio. As the size of the school increases, the percentage of the secretaries who would hire a principal without experience decreases. The same situation exists with respect to the opinions concerning the hiring of teachers

members have confidence in formulating plans and procedures and in executing them. Situations of control and personal advice of pupils are constantly arising that demand the surveillance of the principal. Present day emphasis on curriculum revision demands daily observation of aims and objectives that are to be obtained. Age and everyday usage consume a school plant and its component parts. The janitorial force and maintenance department demand daily guidance of the principal.

The high school administrator who is successful finds it wise to care for his school first and to proceed with other activities second, should time permit. However, there are a few principals whose schools are burdened by oversupervision and a



The foyer of the Cranford High School, showing the corridor of the rear wing and display cabinets backed with mirrors.

Cranford's New "High"

HOWARD R. BEST

Supervising Principal
Cranford, N. J.

IN OCTOBER 1935, the community of Cranford, N. J., voted 4 to 1 to accept a federal grant of \$352,000 and to bond the district for \$498,000, making a total of \$850,000 to erect a new six year high school. Construction was started in the spring of 1936, but, because of numerous delays caused by jurisdictional disputes between the labor unions, Cranford High School was not completed until January 1938.

The building is of Georgian design, constructed with limestone cornices, limestone portico and columns in the center. The auditorium and gymnasium are situated in opposite wings with entrances of similar design. It has been planned with a flexibility that will permit adaptation to a changing educational program. Other outstanding features are: (1) the vast amount of acoustical treatment; (2) scientific lighting; (3) its

esthetic phases, which add to rather than detract from the functional and practical aspects, and (4) the complete utilization of space. It also will be noted that the so-called "noise" units have been located in the two wings of the building. This permits these units being used in a functional manner, the noise of industry in no way interfering with the program in the "academic" areas.

The left wing houses the auditorium, which is 80 by 140 feet. The balcony accommodates 300 and the main floor, 1000, making a total seating capacity of approximately 1300. The ceiling is acoustically treated and has recessed louver auditorium lights. The stage is 35 feet in depth and 70 feet in width, with a proscenium arch 50 feet in width and 18

feet in height. The general color motif is royal blue.

Directly beneath the stage is the music room. This room, measuring 80 by 45 feet, has a folding wall which permits it to serve in the double capacity of boys' and girls' dressing rooms when the auditorium is being used for special programs. It is acoustically treated throughout.

The right wing houses the gymnasium, which is 80 by 108 feet. The ceiling is acoustically treated and has recessed indirect lighting. For day classes, the gymnasium is divided by a huge folding partition 24 feet in height, providing two gymnasiums, one for boys and one for girls. Folding bleachers provide seating for approximately 1500 at games. The girls' locker rooms, shower rooms and dressing rooms are located in the rear of the gymnasium wing. A corrective gymnasium is located on the



Above: Distinctly Georgian in design are the limestone portico, columns and cornices, which are the main decorative features of the Cranford High School, Cranford, N. J. The exterior walls of the building, which is planned with a flexibility to permit adaptation to a changing educational program, are of brick construction. The architects were Poggi and Bragdon of Elizabeth, N. J. For a description of the landscaping and planting around the new structure, turn to page 54.

second floor above the girls' locker rooms.

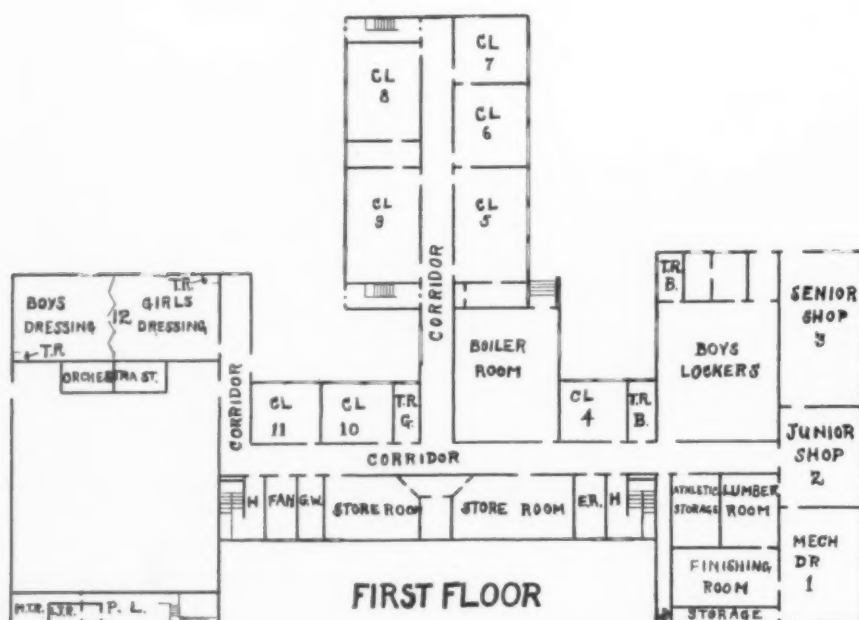
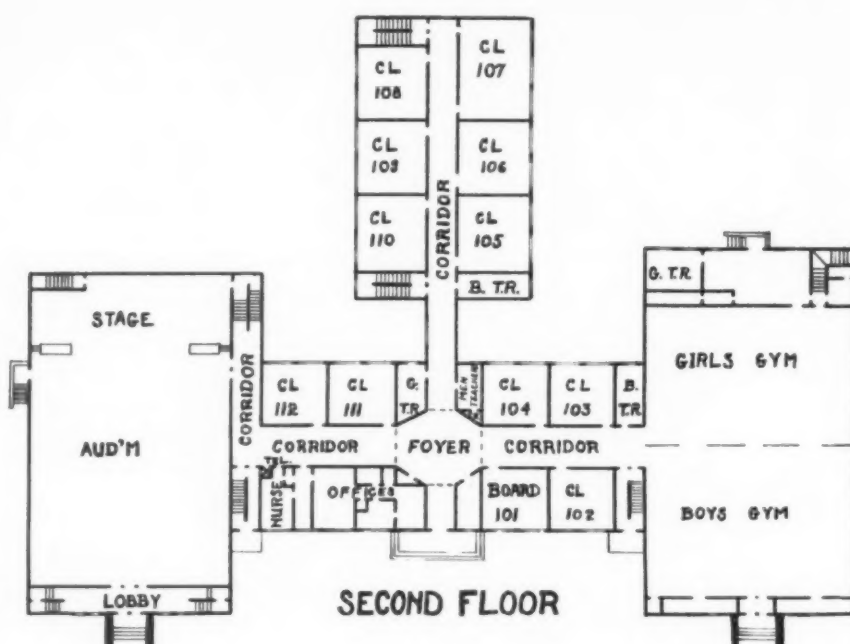
Junior and senior shops are underneath the gymnasium. Two electrical pipe trenches extend beneath the floors of both shops, permitting a maximum of flexibility in the moving and placing of machinery and equipment.

The center and the rear wing house 47 classrooms. The first floor is devoted entirely to science laboratories and classrooms; the second floor of the rear wing, to commercial work. It was the purpose to get away from the conventional type of classroom. Therefore, to break the

square monotony, the rear of the room is arched with built-in cabinets. Maximum emphasis has been placed upon corkboard; map display rails extending above both blackboards and corkboards. Movable desks are used in the major portion of the classrooms.

Lighting conditions and the elimination of eyestrain have been carefully studied. The type of shade used permits the maximum filtration of light. This, together with the indirect lighting system and heavy wattage, permits ideal lighting.

Corridors are particularly attractive, with acoustical treatment and a

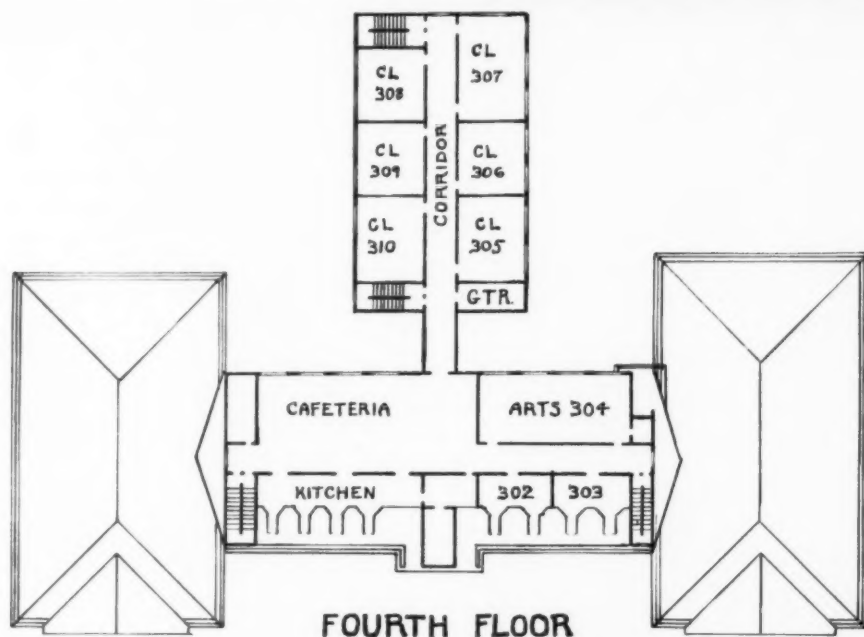


By placing the auditorium in the left wing and the gymnasium in the right wing, the architects have isolated all so-called "noise" units in two wings of the building. Left: The space beneath the auditorium stage is utilized as a combination music room and dressing room. Shops and locker rooms are below the gymnasium. On the third floor plan (which is not shown here), the library spans the front of the center wing. The center wing of the fourth floor tops the roofs of the gymnasium and auditorium, thus permitting an abundance of sunlight to reach the cafeteria on the fourth floor.

terra cotta wall tile. Corridor lockers are recessed and ventilated.

The library, 80 by 35 feet, is one of the attractive features of the building. Here an arched effect is used at both ends.

Cafeteria and domestic science rooms are located on the top floor. This arrangement is based on the theory that in order to safeguard the health of children and to give them an appreciation of the right type of living conditions, those areas in which food is served should have a maximum of sunlight. Also, in placing the cafeteria on the top floor, food odors do not penetrate other areas of the building. The cafeteria is acoustically treated throughout.

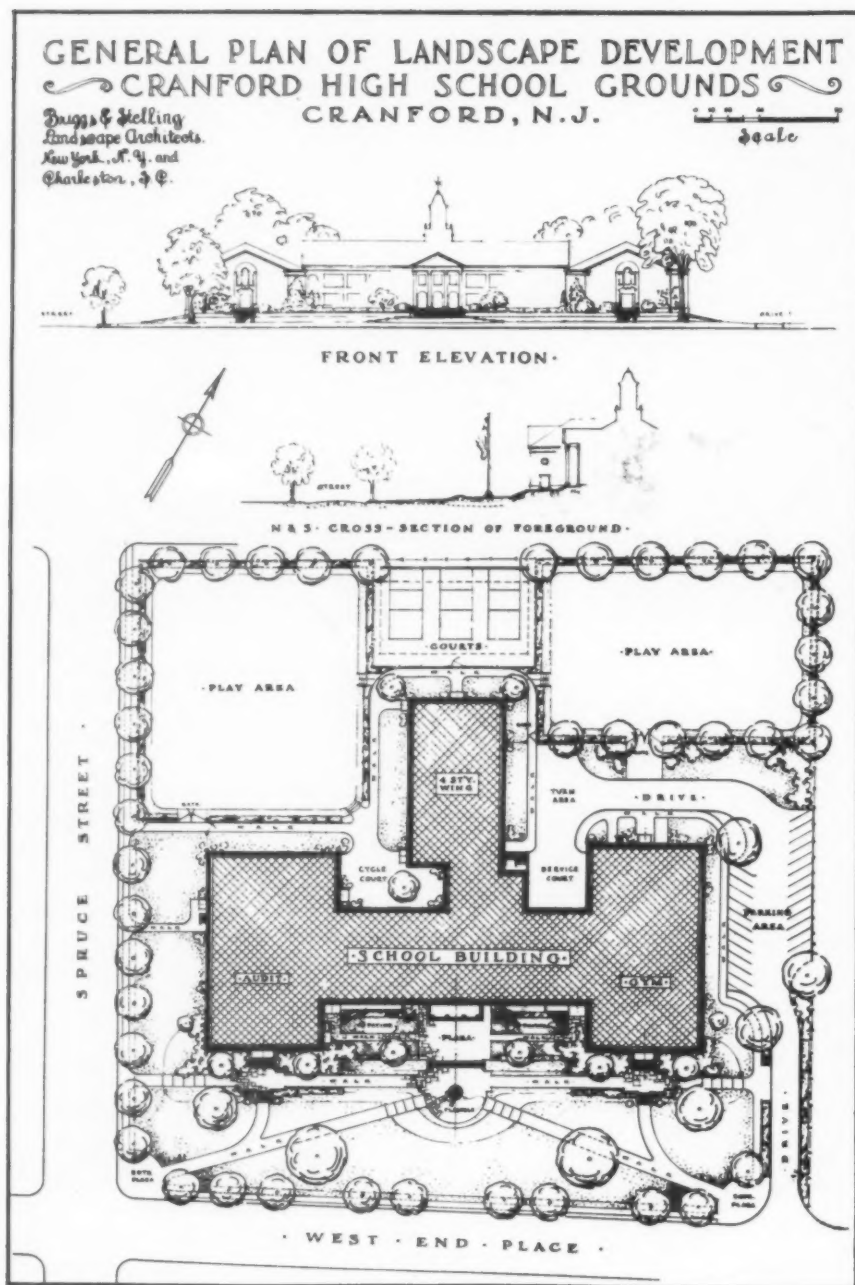


Upper right: The library is one of the attractive features of the building. Here an arch effect is used at both ends of the rectangular room. The ceiling is acoustically treated and indirect lighting fixtures permit as nearly an ideal lighting condition as is possible. The library furniture, as well as that used in the classrooms, is of pin construction with interlocking mortised joints. Right: Lincoln type tables are used in the chemistry laboratory. Through specifications developed in the superintendent's office, a superior grade of equipment was purchased. All laboratories are on the first floor.

Approximately \$80,000 was spent for equipment. A careful study was made and all equipment specifications were developed in the superintendent's office. A real economy was effected in the purchase of a superior grade of equipment. It probably cost from 15 to 20 per cent more than a cheaper, less functional type. All the furniture, for example, is of pin construction with interlocking mortised joints.

A complete air conditioning system, which permits even temperature during all seasons, has been installed. The building is also equipped for radio with a central panel control in the principal's office. Because of their functional use, all areas, which produce a possible fire hazard, are equipped with a sprinkler system.





Developing the Site

A. CARL STELLING
 Briggs and Stelling, New York

WHEN the board of education of the township of Cranford, N. J., embarked upon a school building program, it had in mind a school plant that would accommodate a minimum of 1500 high school pupils of the community.

As there are numerous elementary schools in this community, it was deemed desirable to place an athletic and recreation field apart from all the schools, to be used by

the entire school population of the community.

Consequently the new Cranford High School was placed on a relatively small plot. The location, being comparatively central for all purposes, influenced the decision to choose a site a block away from a main thoroughfare, thus safeguarding the pupils against the hazards of through traffic. With the corner location, as shown on the general

plan of landscape development, the school has been made accessible from practically all sides.

The building is two stories high in front and four stories high in the rear. The plot is comparatively level, being slightly lower at the rear than at the front. As the building was already designed and erected prior to the engagement of a landscape architect, a solution had to be reached under limited flexibility.

The problem of approaching the main portico entrance of a building, which is 14 feet above street level and only 65 feet away from the street, becomes evident at once. A straight approach would have been expensive and would have created undue hardship on the pedestrian. In addition, it would have looked steep. The problem of circulation had to be considered; also, the facts that the building did not parallel the street upon which it faced and that a building in the Georgian style of architecture and of such great prominence required a suitable foreground.

After study it became apparent that the children came in equal numbers from the east and west. With this and the temptation to cut corners in mind, diagonal approaches to the main entrance were decided upon.

The American flag plays an important rôle in school life. It should at all times command the most prominent position in relation to the building and site development. In this instance it seemed ideal to center the flagpole on the main axis through the center of the building opposite the main entrance and to use it as a turning point for all approaches to the front of the building.

Schools require many entrances. With the exception of the main entrance, the others may appear secondary on the plan. This is not true, particularly with respect to side entrances, which are used constantly during the school term. Before and after school and during recess periods the greater portion of the school population assembles around the entrance areas. This requires space in the nature of a plaza. A solid plaza of concrete would mar the foreground of the attractive building and would greatly injure the design and scale. Therefore, the plaza was given greatest importance opposite

the main entrance through the introduction of flagstone paving and adjacent walks leading to secondary approaches, reduced to scale in the order of their importance. However, as the area of the plaza still had to remain large, the secondary walks were flanked by brick paving in herringbone pattern, in keeping with the brick façade of the building.

To summarize the solution of the approaches for the front of the building, three definite aims have been attained: (1) the approaches are pleasing and commensurate with the building requirements; (2) they are wide and numerous enough to accommodate all pupils, and (3) most steps have been eliminated and the access to building has been simplified.

Buses are not needed to transport children to and from the school. However, numerous teachers and other employees use automobiles to go to and from school. Street parking is not desirable and so a parking area has been provided where it is accessible and yet away from curricular activities. In addition, it has been so designed that the same approach to the parking area continues to the service court, where deliveries are made and coal or oil may be discharged.

As already explained, major play activities are conducted on the main school field away from this site. But that field does not provide for the recess and minor recreational requirements of the school. The remaining portions of the school property have been developed into small play areas which may be used for general recreational purposes. These are convenient to the rear and to gymnasium exits and are away from street hazards. A convenient bicycle court has been placed in an otherwise unusable area. A ramp has been constructed at the Spruce Street rear entrance walk so that pupils may park their bicycles, which number from 100 to 200, in the racks stationed in this area.

The building being Georgian and of good design, it was evident that the site should not be overplanted. The common practice of buying a truckload or two of ornamental evergreens is not a bargain when you do not need them. The type of planting to be used should be simple, merely accentuating the lines of the

building in order to bring out the greatest value. This is simply illustrated on the front elevation of the plan. The types of material used cannot be specified for general use

but should be strictly adaptable to the climate and surrounding country and should be able to withstand a minimum of maintenance and possible rough usage.

Dowagiac Community Plan

CARL M. HORN

Superintendent, Dowagiac, Mich.

THE American community has been an important institution in the past but its influence has decreased greatly. This is the result of improved means of communication and transportation, the rapid growth of urban centers and centralization of government.

The Dowagiac Community Plan of Dowagiac, Mich., aims at the coordination of the efforts of the agencies and organizations of the community toward the improvement of health, happiness and prosperity. A Community Council with representatives of 55 organizations and an executive board of 18 is provided. Parallel to and coordinated with the Community Council is a Youth Council representing 800 young people, or about 75 per cent of the youth between the ages of 14 and 23 years in the community.

Paid leadership is essential to the success of such a plan. This is made possible through the cooperation of the state department of public instruction and the board of education. The director also is director of vocational and adult education. There has been no other expense except for office help, stationery and other minor expenses. The University of Michigan has cooperated with the project in various ways.

Although the plan has been in action only for a short time, the following achievements have resulted: (1) a community school offering a wide variety of practical courses in which more than 10 per cent of the adults participated in community forums on subjects of civic interest; (2) a placement service; (3) hot lunch for all undernourished children; (4) survey of volunteer entertainments; (5) community calendar; (6) civic orchestra; (7) civic chorus; (8) extension of library service; (9) survey and recommendation of recreation needs

and facilities; (10) charity carnival; (11) youth dances weekly; (12) boys' center, with ping pong, billiards, handicraft and other recreational facilities; (13) girls' center with similar facilities; (14) obtaining of a county health department; (15) local child guidance clinic, and (16) waitress and maid training course.

Proposals for the future are: (1) industrial board for better relations between employers and employees; (2) better farming and marketing; (3) better roads; (4) resort developments; (5) public health program; (6) guidance and placement of youth; (7) city beautification, and (8) a community building.

The plan is a long term program. Its success depends on human interest, effort and cooperation rather than on money. Its major objectives are:

1. Coordination as opposed to duplication, competition and disorganized material.

2. Discovery and utilization of community resources, both human and material.

3. Discovery and utilization of interests, dreams and aspirations of citizens.

4. Recognition of the importance of extraschool influences on the education of the child.

5. The provision of a vehicle whereby a study is made of community possibilities and needs, a coordinated effort is made toward the achievement of the plans set up and continuing appraisal is made of the results.

This is democracy in action and at its best. It already has brought a higher degree of happiness and contentment to our people. Because it is so representative of the community, we believe that the Dowagiac Community Plan offers the best possible solution to the many problems facing any community.

Appraising Guidance

KENNETH W. EELLS

WHAT are the characteristics of an effective guidance system for a modern secondary school? What technics may be used to identify a good guidance program? How may guidance be improved? These are some of the questions that faced the Cooperative Study of Secondary School Standards when it sought to develop valid criteria for the evaluation of secondary schools.¹

Through actual use of its material in more than 200 schools, the Cooperative Study has found that two things need to be kept constantly in mind when evaluating a guidance program: (1) the guidance program must be evaluated in terms of the philosophy and objectives of the school and the needs of its pupils and community; (2) no one part of a school, particularly the guidance program, can be evaluated apart from a consideration of the entire school situation.

The guidance program must be evaluated in terms of the educational philosophy held by the school, the specific educational objectives of the school, the particular needs of its pupils and the needs of the community (local, state, regional, national and international), which the school

serves. Thus, a school whose educational philosophy is directed at the training of leaders will have a different type of guidance from the school whose philosophy is based on the preservation of a democratic form of government. Or, the guidance program in a school trying solely to develop the intellectual or mental abilities of its pupils will differ from the program in a school trying to develop the emotional, social and cultural sides as well.

The guidance program in a strictly college preparatory school should stress the educational aspect of guidance and, therefore, might in some cases be excused from devoting much effort to the vocational aspects of guidance. Similarly, a trade school might have mostly vocational guidance and little or no "college entrance" guidance. The typical public school will need guidance of various sorts and will need a program that meets the needs, not of the majority groups of pupils only but of all the pupils.

Taking an example from still another area, the guidance program in a school the pupils of which come largely from foreign born parents usually will need special adaptations

along the line of social and cultural guidance. The school whose community has a strong and effective public health program will not need as much emphasis on health guidance in the secondary school as will the school whose community generally neglects the health problem.

Many more examples might be cited to illustrate the fact that persons attempting to evaluate a guidance program, whether the principal, the counselor, a committee of teachers or someone outside the school, must understand the particular philosophy and objectives of the school and the needs of the pupils and the community that it seeks to serve. Not only must the evaluator understand these factors as clearly as possible but he must evaluate the guidance program in terms of them.

In a good school, guidance permeates the whole school and is affected by nearly every important aspect of the school. This fact must be kept constantly in mind by the evaluator. Guidance is not limited to the activity that emanates from the office of the head counselor, if there is one, but includes all that activity on the part of the school, outside the more formal instruction in subject matter

¹ For descriptions of other phases of this study, see earlier articles in this series in the November, December, January and February issues of *The NATION'S SCHOOLS*.

II. Basic Information Regarding the Pupil

A. PERMANENT CUMULATIVE RECORD

2. A Correct Report of the Pupil's Record

CHECKLIST

The permanent cumulative record includes such information as the following:

- | | | | |
|-----|---|-----|--|
| (+) | 1. Name, sex; date and place of birth | (o) | 7. Marked interests and abilities |
| (+) | 2. Name and location of school or schools attended | (+) | 8. Names, dates, and scores on standard psychological tests taken |
| (-) | 3. Academic record for each year, with special note of particularly good or poor work | (o) | 9. Names, dates and scores on standard achievement tests taken in the past two years |
| (+) | 4. Health record; serious or protracted illnesses | (o) | 10. Personality trait ratings by several teachers |
| (-) | 5. Attendance and tardiness record; reasons for excessive absence or tardiness | () | 11. |
| (o) | 6. Conduct or citizenship record; explanation of unusual behavior | () | 12. |

EVALUATIONS

- (3) y. How well—qualitatively and quantitatively—is such information as the above provided?
(2) z. How extensively and effectively is it used for pupil guidance?

Comments:

Fig. 1—A sample section from "Evaluative Criteria," as filled out for a particular school.

creditable job even under adverse conditions.

It should be clear from the foregoing that the Cooperative Study's method of evaluating the guidance program in a school must be a functional one. The methods used must be such that they have as high a degree of objectivity as possible and yet do not presuppose any particular type of organization of the guidance program. They should consider not only the work carried on by the formal counselor, if there is one, but also the effectiveness of all aspects of guidance in the school as they actually relate to the pupil and his needs.

In an effort to develop a method of evaluation that would meet these requirements, the staff of the Cooperative Study examined a large number of committee reports, research studies, monographs and similar material bearing on all phases of the school problem, including guidance. This material was abstracted and organized into a set of criteria to use in identifying a good guidance system. These tentative criteria were submitted to numerous educators for study and for suggestions on improvements.

Criteria Revised Two Times

After further revision the criteria were printed, along with those developed for other areas of the school program (curriculum, pupil activities, library, instruction, outcomes, staff, plant and administration), and tried out in 200 secondary schools, carefully selected so as to be typical of varying philosophies and varying pupil population problems and typical of American schools generally. At the end of this year of tryout and experimentation, the criteria were further revised.

The present material for use in evaluating the guidance program of a school consists of one 16 page section of the "Evaluative Criteria," containing check lists and evaluations on various phases of the guidance program and one page of "Educational Temperatures," which provides a graphic method of portraying the evaluations made in the "Evaluative Criteria." The material is organized as indicated in the following outline:

Articulation between school and lower schools that send pupils to it

Basic information regarding pupil

Permanent cumulative record: (1) information regarding pupil's home and family, (2) report of pupil's record (Fig. 1), (3) record of pupil's physical and health status, (4) record of pupil's psychological and other traits, (5) reports of progress

Other matters of record

Nature and use of records and reports

Operation of the guidance program

General organization

School organization and program

Registration and pupil load

Problems of the future

Social and civic relationships

Personal problems

Additional means and materials used in guidance

Postschool relationships

Selection of the postsecondary school
Adaptation to and success in civic and social life

Obtaining employment

Results of guidance

Guidance staff

Pupils per counselor

Preparation and qualifications

Improvement in service

Supplementary data

General summary

General evaluation of the guidance service

One section of the "Evaluative Criteria," showing part of the check lists and evaluations for the permanent cumulative record, is reproduced, as filled out for a particular school, in figure 1. This is only one of five sections devoted to the desirable contents of a permanent cumulative record. This section has to do only with a report of the pupil's record; other sections outline the desirable information relative to the pupil's home and family, physical and health status, psychological and other traits and reports of progress.

The use of the plus sign in the check list indicates that those items, characteristics or functions are present to a satisfactory degree in the school that is being evaluated. Use of the minus means that those items are present to some extent but are not entirely satisfactory. Use of the zero means that those items are absent entirely or, if present, are unsatisfactory. After the evaluator, whether he is the principal, the head counselor or someone from outside the school, has checked each item in the check list he makes the indicated evaluations, using a five point scale ranging from 5, highly satisfactory,

or practically perfect, to 1, very poor. In the case illustrated in figure 1 the evaluator felt that the information provided on the card was about average in quantity and quality, as indicated by the 3, but that its extensive and effective use for pupil guidance was distinctly below average, as indicated by the 2.

"Mercury" Is Indicative

In order to make easier the interpretation of the 47 evaluations on guidance, they are grouped together into eight summary scores and each one is portrayed graphically on "educational thermometers" as illustrated for a particular school in figure 2. The height of the "mercury" in each thermometer indicates the relative height of the score of the school being evaluated, while the initialed norms on each side of the scale make it possible to compare this standing with that of other schools of the same geographical region, the same size, the same type of control and the same accreditation status.

Even more important than this comparison of one school with another, however, is the comparison of one thermometer with another for the same school. Diagnosis of the school's strong and weak points should be the first step toward improvement. The principal of the school illustrated in figure 2, for example, can see at a glance that the articulation of his school with the lower schools, the actual operation of its guidance program and its treatment of postschool relationships are definitely below average, while the improvement in service of its guidance staff is decidedly superior.

It is recognized, of course, that the criteria are not perfect, that they never will be. It is impossible to measure perfectly an area characterized by so much that is intangible and personal. Considerable evidence exists, however, as a result of the Cooperative Study's experimental program, to support the belief that the present criteria, when used as recommended, are moderately adequate as a measure of achievement and are highly stimulating to improvement of the characteristics and functions evaluated.

The Cooperative Study feels that this method, if properly used, will enable a school to make a satisfactory analysis of its guidance organization.

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Taxes on School Activities

M. M. CHAMBERS

Specialist in School Law

PUBLIC schools and other non-profit educational institutions are generally exempted from taxation, both state and federal, upon their property and transactions. This, of course, amounts to an old and well-established governmental policy, but the taxing power is so essential to the existence of government that exemptions never exist by implication but must always have their origin in explicit statutes. Most courts hold that such statutes are to be construed narrowly to exclude all cases not falling unmistakably within their scope. Thus it happens that occasionally even public schools find some of their property is taxable or some of their activities are subject to taxation.

In recent years many states have enacted general retail sales taxes, and a few cases indicate that some of the legislatures either forgot to provide for the exemption of public school activities or failed to do so in a way that would stand the test of litigation. For example, a Kentucky decision in 1934 held that although purchases for the use of public schools or other educational or charitable institutions were exempt from the Kentucky sales tax, all schools must collect and pay the tax "when engaged in the activity of merchant or seller."¹

Kansas Sales Tax Applies

A later Kansas decision is more sweeping, holding that public schools are obligated to pay the taxes imposed by the Kansas sales tax act of 1937, both when purchasing equipment or supplies for extracurricular activities or when buying any article for subsequent resale, and when selling such articles or tickets of admission to athletic contests, literary events, musical recitals, dramatic entertainments, dances, parties, lecture courses or any other activities where admission fees are charged or sales are made. This conclusion was

reached despite an exemption clause in the tax act which expressly excepts gross receipts from educational activities where the entire amount of such receipts is expended for educational purposes.

Fixing its attention chiefly upon the sales of confectionery and soda pop in connection with some of the school events, the court declared such transactions must be held taxable. After asserting further that expenditures for school parties, picnics and

Occasionally even public schools find some of their property or some of their activities subject to taxation, since tax exemptions do not exist by implication but must have their origins in explicit statutes

dances could not be said to be for educational purposes within the exemption, the opinion concludes that all school activities, even including the publication and sale of school newspapers, are generally inextricably interwoven in their control and financial management so that no distinction among them for purposes of the tax act is practicable.² Obviously the last named conclusion is of doubtful validity.

One of the judges dissented vigorously, expressing his belief that the exemption of "gross receipts from educational activities" should embrace all the transactions in question. Said he, "Does the fact that an activity is entertaining rob it of its educational features?" He added an elo-

quent and convincing argument for the educational value of school dances and of parties conducted by such school organizations as the Hi-Y clubs and the girl reserves.

The moral of the Kansas tale is that when sales taxes or other new types of taxes having a possible application to school activities are enacted, care may well be taken to see that the draft contains an explicit and unequivocal exemption clause covering these enterprises, unless the legislature positively chooses to adopt the policy of taxing them.

A straw in the wind indicating that educational institutions are exempt from the local sales tax in the national metropolis comes in the form of a decision upholding the exemption of New York University from the New York City sales tax, under a clause which excepts "receipts from sales or services by or to semipublic institutions," and defines as semipublic "those charitable and religious institutions which are supported wholly or in part by public subscriptions or endowment and are not organized or operated for profit." The university is exempt from the tax, both on receipts from its sales and on the amount of its purchases of tangible personal property within the city.³

Rule Football Big Business

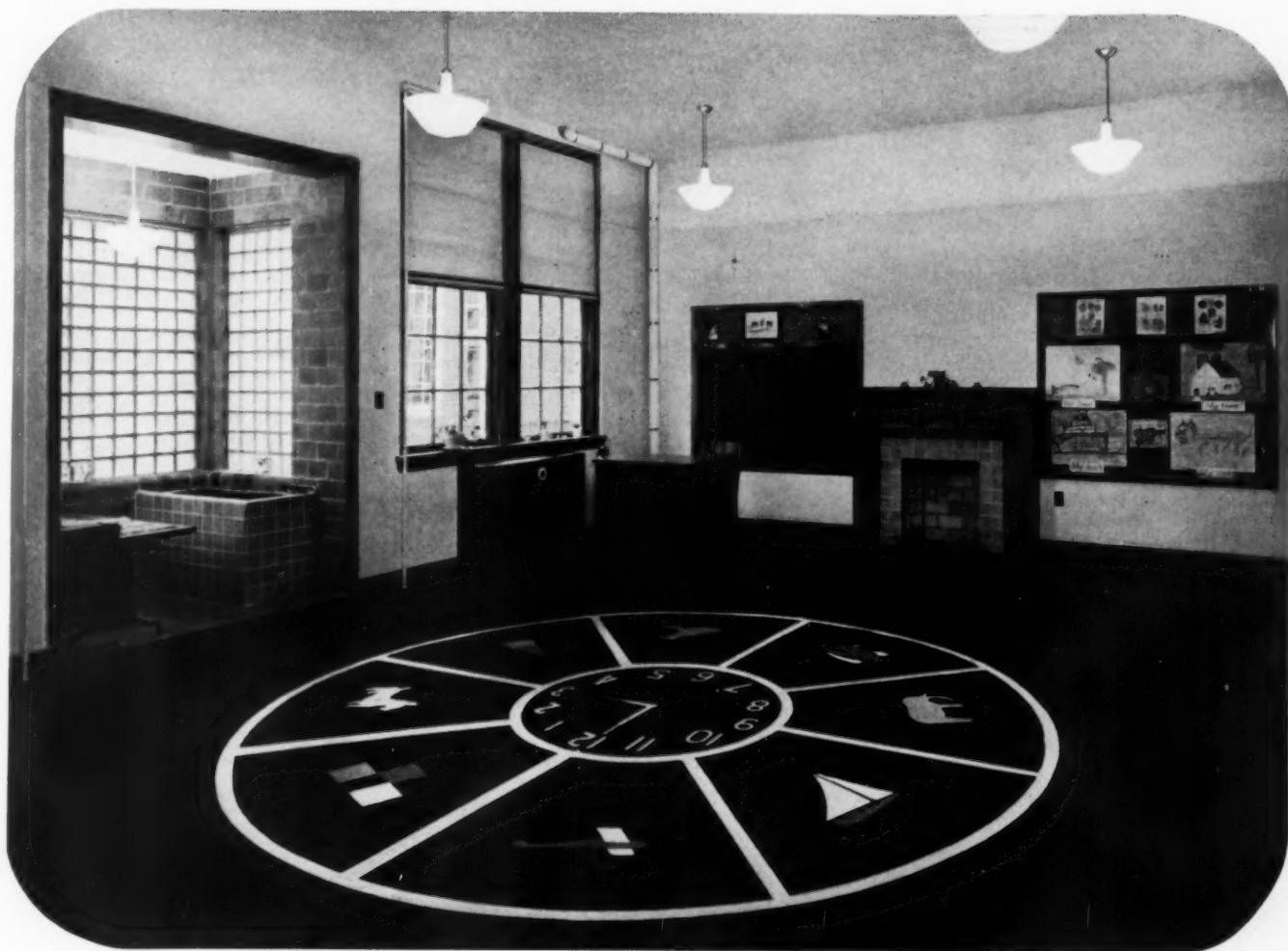
For several years the federal government has required the proprietors of commercial amusement enterprises to collect and to pay a tax on their sales of admission tickets. Whether this tax should apply to state university football games has been litigated in several federal courts for some four years and has finally been decided by the U. S. Supreme Court in an opinion holding that these athletic contests, primarily for exhibition

¹City of Covington v. State Tax Commission, 257 Ky. 84, 77 S. W. (2d) 386 (1934).

²State Tax Commission v. Board of Education of Holton et al. (Board of Education of Parsons et al., Interveners), 146 Kan. 722, 73 P. (2d) 49, 115 A. L. R. 1401 (1937).

³New York University v. Taylor, Comptroller, 251 App. Div. 444, 296 N. Y. S. 848 (1937), affirmed without opinion in 276 N. Y. 620, 12 N. E. (2d) 606 (1938).

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purposes, constitute a business subject to the tax.⁴

This does not deny that the university is an agency of the state or that the conduct of athletics is an essential part of the state's educational function; it merely holds that when such activities are conducted in a

⁴*Allen v. Regents of University System of Georgia*, 58 S. Ct. 980 (1938), reversing *Page v. Same*, 93 F. (2d) 887, which affirmed 18 F. Supp. 62, conforming to 81 F. (2d) 577, reversing 10 F. Supp. 901.

manner and on a scale comparable to other taxable business enterprises the fact that they are operated by a state does not make them immune from the federal tax.

The question of taxation of real property owned by public school districts seldom if ever arises except in connection with property not actually used as a part of the school plant. We are not considering here the matter of special local assess-

ments for street paving, water mains and similar improvements, because technically these are not general taxes. School plants are often held to be subject to them.

Two recent cases disclose variation among the states regarding the taxability of school property not actually used for school purposes. A lot on a street corner in Evanston, Ill., was purchased by the local township school trustees fifty years ago and used as a school site until 1925, when the school was moved elsewhere. Thereafter the trustees entered into a 99 year lease granting the use of the premises to a private party. By 1936 the lot contained two valuable buildings, housing a theater and a retail store, and the lessee was paying into the township school funds an annual rental of \$22,500. The taxing authorities assessed both the leasehold and the fee-simple ownership of the property, and the latter was held to be properly taxable against the school district as owner. Said the supreme court of Illinois: "The property was not devoted to school purposes and was subject to taxation."⁵

An opposite conclusion was reached in the same year in a somewhat similar case in South Dakota. Here a school district acquired a residence property in satisfaction of the liability of a former treasurer in custody of its funds and proceeded to rent the property and to add the income to the school funds. When the county tax authorities sought to assess the property, it was held to be exempt under a statutory exemption of property belonging to "municipal corporations," and the question of whether the school district had acquired it lawfully was not allowed to be raised collaterally.⁶

Probably exemption of such property when temporarily in the hands of a public school district is readily justifiable, but whether permanent exemption should be granted is a question involving far-reaching issues of social policy which require us to decide whether we shall encourage public school corporations to enter into competition with the private real estate business.

⁵*People ex rel. Gill, County Collector, v. Trustees of Schools et al.*, (Ill.), 4 N. E. (2d) 16 (1936).

⁶*Egan Independent Consolidated School District No. 1 v. Minnehaha County*, (S. D.), 270 N. W. 527, 108 A. L. R. 572 (1936).

So the Public Will Know

GEORGE A. SMITH

Supervising Principal, Quarryville, Pa.

NAMES, pictures and an anniversary! What a combination for directing the interest of the public to its schools! This trio of mediums was recently employed successfully by the Quarryville School District, Quarryville, Pa., in centering attention upon an annual open house program.

In assembling suggestions for this program the discovery was made that it was the fortieth anniversary of the founding of the Quarryville High School. This idea was at once adopted and open house day was made an anniversary event.

"Forty Years of Progress," was the appropriate title chosen for a booklet designed to arouse public interest. With this title there was pictured on the cover the development of the school building program, traced from a small two room building in 1898 to a large modern structure in 1938. The files of the local newspaper furnished the pictures of the early buildings.

The next step was the compilation of a list of graduates, faculty members and school directors for the directory section of the booklet. The school files furnished this information, except for the early years. Once again the newspaper files supplied the missing data, since it was the custom of the local newspaper to cover each commencement in detail.

When it was advertised through the school that a booklet of this nature was being distributed, practically everyone whose name appeared in it was interested in attending the program. The appearance of the booklet with all the names of graduates,

teachers and directors recalled many class associations, as well as teacher and director relations. One aged lady of the community reported that she had attended every commencement of the last forty years and had something of interest to relate concerning most of them. An elderly man, a former school director, recalled having presented the diplomas to the first graduating class. Practically every name recalled for someone associations with the school and, in consequence, the book had a great influence in centering interest in this particular open house celebration.

To catch the attention of each parent and each child associated with the school, one large picture of the entire pupil enrollment was arranged along with the building pictures on the cover of the booklet.

A spread in the center of the booklet was used to depict the major activities of the school. A local photographer made a number of inexpensive miniature "candid camera shots" of activities that had the most appeal. From the miniatures, 12 of the most representative activity pictures were enlarged and reproduced. This cross-section of the life of the school, shown in pictures with short catchy captions, acquainted the visitors with the work of the school.

The booklet proved so interesting that many persons who attended the program requested extra copies for their friends who were unable to attend. Among the 700 parents and friends who visited the school there was a general expression of appreciation for the opportunity to inspect it.

INTERNATIONAL SCHOOL BUSES ..

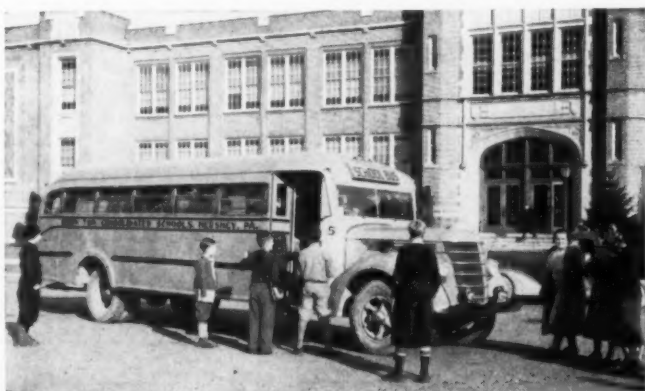
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INTERNATIONAL

SCHOOL BUSES



This three story building was built for the band at Lenoir High School, Lenoir, N. C. The cost of that part of the building that is finished and in use was \$40,000. Located on a hillside, the front of the first floor opens onto street level. In the rear the second floor opens onto the school yard.

Built for the Band

JAMES C. HARPER

Band Director, Lenoir, N. C.

THE school band has always done a good deal of hard work which has been nullified by conditions beyond its control. Both in the curricular and the extracurricular fields it usually was organized after buildings had been completed and other school activities were comfortably established with the result that the late-comer took what was left.

The chief concern was that the band must not disturb its school neighbors, and little thought or expense was devoted to providing working conditions that would ensure the greatest return for the labor of teacher and pupil. Happily this condition is changing and today school bands are producing greater return for the budget allotted.

The high school at Lenoir, N. C., has recently completed a three story fireproof building that provides for teaching efficiency and for the comfort of band pupils. Those occurrences that delay, interrupt and disturb have been foreseen and much thought has been devoted to handling pupil traffic.

Acoustics is a major point in school instrumental music and every care

has been taken to ensure ideal acoustical arrangements. Ceilings in halls, practice rooms, library, office and even in toilets and locker rooms are treated with a good grade of acoustical tile. The tile also is used on part of the wall in the band rehearsal room. Treatment of the rehearsal room ceiling is considered doubly important and a more expensive cork surface is used there. Partition walls between practice rooms and between band rehearsal room and library are of gypsum as this was considered lighter, fireproof and more effective acoustically. Ceiling height and the proportions of rooms have been considered in the light of their acoustical properties.

Light switches and fuse plugs are carefully placed where they are under lock and key or where the presence of a teacher prevents tampering. A two-way communication system allows the director in his office to tune to a station in any room in the building. Thus he may listen to practice going on at any point and may do actual teaching, explaining errors and how to correct them. Bad playing habits are stopped be-

fore they progress far enough to become hard problems.

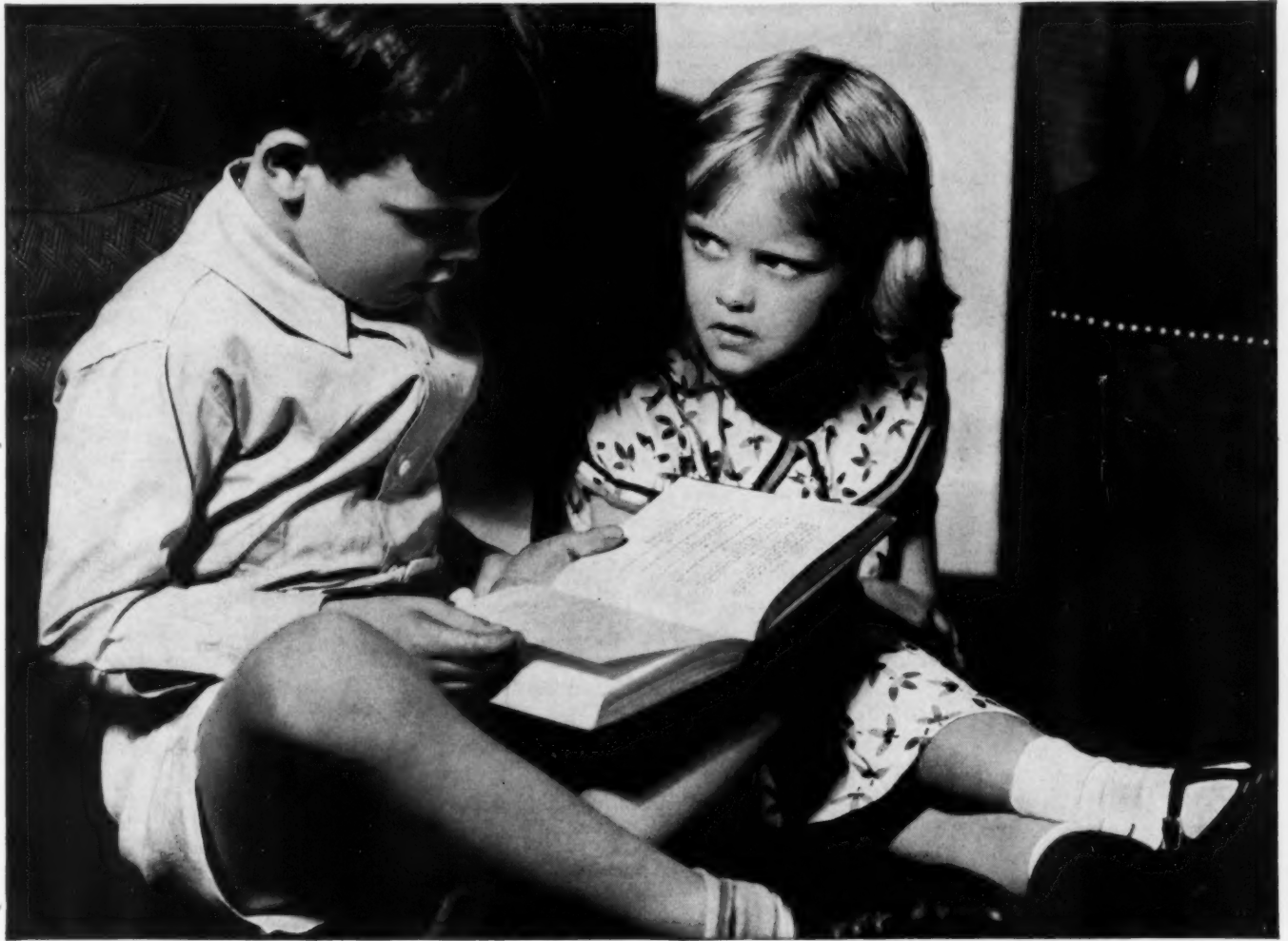
The librarian on the third floor may call the office by buzzer and have the communication system tuned to her station in order to ask some simple question and to get a prompt answer. Otherwise she would have to run down two flights of stairs and then back up the same stairways. An outside telephone call to the office may often be relayed over the microphone and the message delivered without the pupil musician so much as having to lay down his instrument.

Air conditioning machinery has not yet been installed, but space has been provided for it and all the conduits are in the walls so the later installation will be a simple matter. The same is true of the freight elevator. The shaft is there and the power wiring is in the conduit in the walls. Incidentally the walls of the building also carry rigid conduits containing the proper wiring for radio reception, radio broadcasting and the class gong system. The cable is of a size to carry not only the present load but also that of future additional units of the plant.

Lighting is indirect and is ample for every pupil need. The heating plant is designed for both present and future requirements. A mechanical stoker saves fuel and reduces the demands on the janitor's time. Ventilation is efficient and special construction insulates against heat in summer and heat escape in winter.

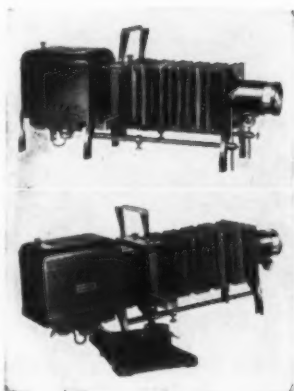
The band building is laid out so that buffer rooms, such as the library and class theory room, are placed on the side nearest the academic building while the band rehearsal room and the majority of the practice rooms front on the school athletic field. This plan scatters the sound where it will do no harm since most of the practice is done at a time of day when the field is not in use.

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This nearness to the athletic ground also holds an advantage at times when the band plays for football games and other athletic events.

The building is on a hillside and the front door of the first floor opens onto street level. At the back, the second floor opens onto the school yard, thus giving ground level exits from both first and second floors. Adequate fire escapes provide exits from second and third floor levels. While building design reduces disturbance to academic teaching, the distance to the main high school plant is short and pupils come and go at regular class periods on schedule.

The proof of the pudding is in the eating and a band building is best tested by use. A notable improvement in band precision and in accuracy of pitch and technic was noticed as soon as the building was put in use. Tones are no longer blurred by echoes and both teachers and pupils hear the tones as they are, not distorted by faults in the room. A manifest pride in the new building and a sense of responsibility for it have been apparent and the whole band has taken a step forward in morale and industry. Time is saved in freedom of interruption. Band work has gained a new dignity in the eyes of pupils and of community.

The cost of the part of the plant that is finished and in use is \$40,000. This could have been reduced somewhat by planning only for the building as it stands at the present time.

Central Supply for Small Schools

J. E. CLETTENBERG

Superintendent, Palatine, Ill.

FORMERLY each faculty member of the Palatine Elementary School, Palatine, Ill., ordered his own classroom supplies, which were stored by each teacher in his home-room supply closet. Often unused school paper accumulated year after year while teachers continued to request their usual supply of materials. Occasionally one teacher would re-order a commodity that other teachers had in excess.

This individualized system for the purchase of school supplies bound tax money rigidly and inefficiently. Such a loose purchasing policy in operation over a long period of time hindered the adoption and use of newer types of school supplies that reflect a progressive educational program.

At the end of the 1936-37 school year the surplus supplies were collected in a centralized storeroom which had been built for that purpose. The teachers' supply orders for the subsequent school year were requested and checked against the supplies on hand. Such a wealth of paper had been collected that it was unnecessary to order any more for six months. Even now the needs of the school for poster paper of many hues may be supplied for two or

three years to come by unused orders on hand.

Until the available paper supply was exhausted, a record was maintained of teachers' needs through written requisitions for supplies, information that was used later in drawing up bids. Just to mention an instance of thrift among the several articles, paste was purchased in gallon instead of quart jars, thereby reducing the cost by one third. Moreover, when paper was bought savings were effected through the purchase of paper in large size sheets. It was cut down to proper size by means of a paper cutter already owned by the school. When the year 1936-37 ended, the school had saved about \$50.

By 1937-38 the gradual changes in the school's purchase and distribution of supplies resulted in a completely organized and centralized system. The amounts and kinds of paper used by different rooms and departments for the entire year were a matter of record, because written requisitions for nearly two years had been checked against teachers' yearly orders. Now the school, calculating its yearly supply needs on factual information, drew up specifications for all supplies and submitted them to a number of companies. Purchases were made on the basis of price, although quality was not sacrificed.

The faculty approved this gradual change because the savings were diverted into school equipment formerly believed to be too expensive.

Because educational practices require larger allowances of materials and supplies, centralization of school purchasing on a yearly basis offers the small district the possibility of improving its educational service. There is no reason why centralized purchasing can not be extended beyond the single school unit to embrace adjacent school districts, because their combined ability to buy in larger quantities will result in lower prices to the participating schools. In order to allay suspicion of misuse of tax funds, each participating board may have one member on a central purchasing committee.



The band library provides ample facilities for filing many musical scores.

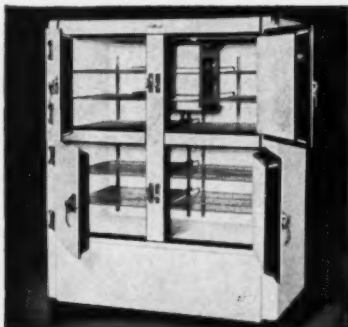
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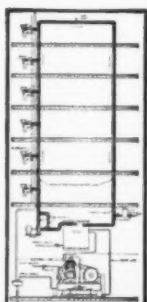


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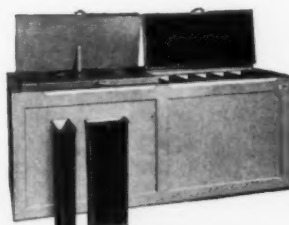
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GENERAL  ELECTRIC
COMMERCIAL REFRIGERATION

Merit Wins Clerical Jobs

A NEW plan of selecting school clerks in the school district of Erie, Pa., promises to solve many problems, according to C. Herman Grose, superintendent of schools. Under this new system 125 applicants have taken the examinations and have reported for interviews before a committee of three.

"We shall soon discover features of our plan needing revision," Mr. Grose explains, "and it is our thought to change it as rapidly as we have evidence that it can be improved."

Under the heading "Appointment of Clerks," the new regulations state:

"After July 1, 1938, all clerks employed in the administration offices, school offices, child study department, dental clinics and delinquent tax office shall be appointed from an eligibility list prepared as provided by the plan of which this rule is a part.

Ranking by Eligibility

"Appointments shall be made from the list upon recommendation of the superintendent or secretary and approval of the board of school directors. Applicants shall be recommended in the order of their ranking from the eligibility list except in the case of positions which demand special qualifications not possessed by the person next in the order for appointment. Complete information shall be given to the board of school directors in regard to any recommendation which involves variation from the list. The superintendent shall recommend candidates for all positions under his supervision; the secretary shall recommend candidates for all positions in the business office."

Rules to be followed in the preparation of the eligibility list for the first time are: "Annually, in the month of July, the superintendent shall apply the approved plan for the preparation of an eligibility list on which shall be included in order of their ranking the names of all applicants who qualify for appointment and comply with the requirements of the adopted procedure used to rank candidates."

By a second method, applicants are

ranked on the basis of the following schedule of points:

1. All applicants who meet the minimum qualification standards shall be given 100 points, which will serve as a base to which extra points shall be added according to merit.

2. Five points shall be allowed for each complete year of academic education above the secondary level up to a maximum of four years.

3. Five points shall be allowed for each year of successful experience up to a maximum of three years, provided such experience has been gained in work of the same kind or in a closely related field.

4. A maximum of 50 points shall be allocated to personal qualities as evidenced in a personal interview, the interview to be conducted by a committee of three persons who shall record their evaluation on an objectively determined scale. The ratings submitted by the three committee members shall be averaged to determine the number of points to be awarded to the applicant.

5. A maximum of 15 points shall be allocated to personal qualities as evidenced by statements made by references submitted by the applicant. References shall be limited to former teachers and employers.

6. One-half, or 100 points, of an applicant's rating above the base shall be determined by tests designed to reveal specific knowledge of subject matter necessary for the efficient performance of the work to be done. The examinations shall include the following: English, spelling, writing, commercial arithmetic, accuracy in checking, shorthand, typewriting and general ability.

The minimum qualifications account for 100 points maximum; preparation is rated 20 points maximum; experience, 15 points maximum; interview, 50 points maximum; references, 15 points maximum, and specific knowledge of subject matter, 100 points maximum, making a total of 300 points maximum.

Minimum qualification standards prerequisite to examination are: (1) graduation from a four year second-

ary school; (2) scholastic rank in the upper half of the class; (3) a minimum of 18 years and a maximum age of 35 years; (4) residence in Erie for two years immediately preceding the time of examination, and (5) the status of an unmarried woman.

Under Article IV, entitled "Administration," the superintendent of schools is required to complete the following tasks:

Prepare copies of the adopted plan and distribute them to all persons who have applications for clerical work on file and to all persons making such application hereafter.

Devise an application blank to be used in obtaining necessary information for ranking applicants.

Administrative Tasks

Devise such other forms as are needed, including a report from references and a chart for the interview committee.

Appoint a committee of three members to conduct the interviews.

Designate a person to select, administer and score the examinations used to determine specific knowledge of subject matter.

Present the completed eligibility list to the board of directors by August 1 each year.

Notify applicants of their standing on the eligibility list before August 1.

Conditions of appointment are as follows:

1. All clerks appointed under the provisions of this plan shall serve a probationary period of three months after which they shall be retained in service if their work is satisfactory.

2. All appointments shall be for the duration of the current school year with reappointment annually if recommended by the administration head under whom they are employed.

3. The adopted salary schedule shall be applied in the determination of the initial salary and annual increments.

4. Transfers may be made at any time if recommended by the administrative head.

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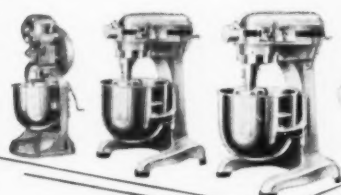
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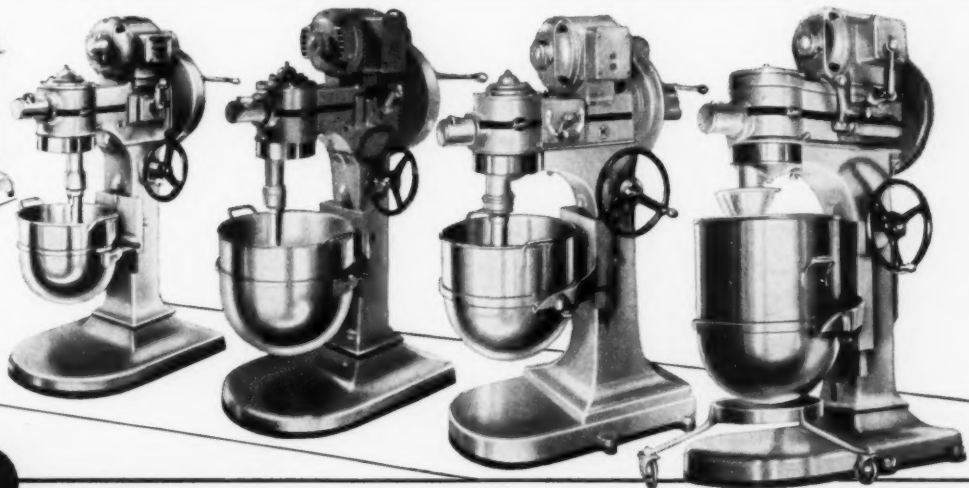


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Choice, Care and Cost of Uniforms

EDNA GILBERT

Cafeteria Manager, Rayen School
Youngstown, Ohio

UNIFORMS are the foundation for sensible dress for cafeteria employees. The cafeteria worker's outfit should consist of suitable type of dress, some device to hold the hair back and in place and the working apron. The pupil worker's outfit is the working apron and the headband.

Before we go shopping, let us consider what qualities are desired in the material of the uniform. It should be washable, of course, because it will have to be tubbed. The cloth in dresses, coats and aprons must be durable, for only then can it be depended upon to give the wear required by an economical buyer. Durability, appearance and washability, therefore, are the main factors to be considered.

Replies to questions sent to manufacturers of uniforms indicate that twill or cotton suiting is perhaps the most durable and is the ideal fabric for heavy duty. Poplin and broadcloth look well and are better for women's uniforms.

Garments Should Be Comfortable

The worker's dress or coat should be selected with regard to comfort. Tight clothing either for walking or for working is a hindrance. Such garments should not take much time to put on or off and should have the minimum of fastenings and trimmings. These should be not easily disarranged or soiled. Usable pockets should be a part of every garment. The straps of the apron, butcher style, cross in the back. This prevents their slipping from the shoulders.

There is nothing in the garment trade today that even approximates standardization of quality or of sizes. To be sure of a satisfactory fit, a garment must be tried on before purchasing and allowance made for shrinkage.

Uniforms for cafeteria workers may be classified in two major groups: white and colored. Properly uniformed cafeteria workers contrib-

ute to 100 per cent sanitation and this can be made more effective by the adoption of an all-white uniform. White garments are more sanitary because they may be boiled without injury. It is evident from this survey that cafeterias are coming more and more to all-white garments. It is agreed, too, that white is more becoming to women of all ages and sizes.

Consensus of opinion favors simplicity in styles. Most directors declare preference for a uniform belted at the waist, with short sleeves and a small rolled collar.

An immaculate, well-groomed appearance, even with a simple garment, goes far toward making the wearer pleasing to the eye. Personal appearance becomes, therefore, a factor in success.

Laundry costs are dependent upon whether or not the work is done by an outside laundry or on the premises. The prices charged by outside laundries are found to be much the same in all sections of the country studied.

Few schools rent uniforms and in most of these it is an experiment.

Only four schools give the yearly percentage cost for laundering workers' uniforms and the range is from .75 to 1.16 per cent of the total laundry cost. The reason for lack of this information is probably due to the fact that all laundry is combined in the laundry expense account and it is difficult to determine the percentage cost for laundering uniforms.

A study of laundries and laundry supply companies indicates that the price charged for renting is about 5 cents more per uniform dress than that charged for laundering only.

It is estimated that two uniform dresses are required per year per person. On each garment the difference between the charge for laundering

only and for rental is about \$1.90. This represents approximately the original cost of the uniform. It is recommended, therefore, that the cafeteria buy the uniform because the institution not only owns the uniform but has one of its own selection.

One of the greatest needs for a woman in her working life is sensible shoes. Work as well as health requires a good, firm, low-heeled shoe shaped to the foot. Worn-out slippers, shoes with run-down heels or high-heeled shoes are not appropriate for work and will soon undermine the health.

Oxford Is Best Style

A brown, low-heeled oxford has been selected as an appropriate shoe for cafeteria workers.

Although workers' wearing apparel ranks high in the cafeteria directors' interest, it is a difficult field in which to give specific findings. There are, in most cases, no carefully formulated or generally accepted standards for judging such commodities. Manufacture and distribution are, to a large extent, local and irregular and, because styles change, tests of specific models are of little value to the purchaser in any given locality.

If cafeteria directors would adopt a conservative garment with a number of models and with small variation of material, the manufacturers of textiles would be glad to provide strong, enduring cloth for the purpose. The ready-to-wear trade would bring out satisfactory uniforms and the better houses would gladly carry them.

It is recommended that directors keep a record of each year's supply of uniforms as is done of equipment. Also it is urged that the laundry expense account be divided into "kitchen laundry" and "uniform laundry." In this way, the uniform expense can be accurately figured and it will be easier to estimate the laundry budget.

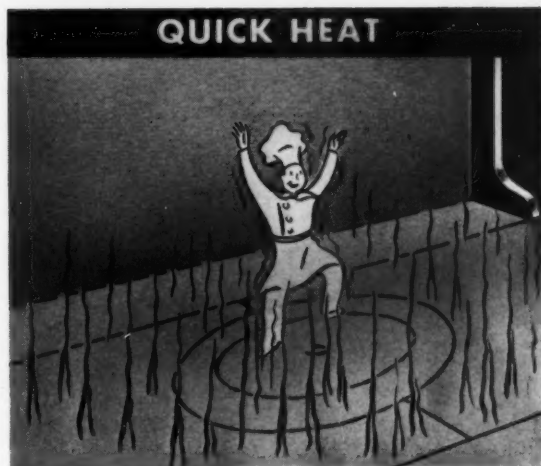
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ELVA L. McINTIRE

Director, High School Cafeteria
Fitchburg, Mass.

NO LONGER is the lunchroom placed wherever there happens to be an unused space. Provision is now made for it in the plans of most high schools. With direct ventilators from the kitchen and with soundproof ceilings, cafeterias may be in any good location.

The cafeteria of the Fitchburg High School, Fitchburg, Mass., is on the first floor, with two approaches from the main corridor, and an outside entrance for the deliveries. It accommodates 750 at tables with swinging seats. As the school has an enrollment of more than 1200, there are two recess periods, each of twenty-nine minutes.

All pupils are required to come to the cafeteria and to remain during the lunch period. They can bring all or any part of their lunch, the menu being planned as an entire lunch or as a supplement. Music is furnished either by records or by radio, and dancing is enjoyed by all who wish.

The service is rapid enough so that 500 pupils select the food they wish, pay the cashiers and are seated in less than five minutes. When they finish eating, they return trays and dishes to long tables, where student workers take them to the dish-washing unit. Here dishes are washed, rinsed and sterilized, then trucked to serving counters.

Two electric water coolers are located in the cafeteria but more than half of the pupils buy milk. Whole milk is used in cooking; thus the milk and cream make up the largest single expense item of food expenditure. An analysis of the milk is made frequently in the city laboratory.

Each article on the menu is sold for 5 cents. The only exception is milk, which is sold for eight cents a pint. Soup or chowder, potato with meat or fish, oven dish, salads, desserts (one always made with eggs and milk), sandwiches in transparent



This first floor cafeteria has two approaches from the main corridor.

bags, vegetable, canned fruits and fresh fruits, in season, are served daily.

The ice cream unit is separate from the serving counter, and the candy is in a room by itself. Needless to state, this arrangement has decreased the sale of candy. Either candy or ice cream may be bought at any time during the lunch period, but no one buys until a substantial lunch has been eaten. This is just one part of the attempt to train for good food habits.

The commercial department furnishes the cashiers and does all typing. The manual training pupils make the menu boards; the printing department, the signs. One branch of the science department supplies plants, and, in the spring and autumn, flowers for the attractive teachers' dining room. There is also complete cooperation between the cafeteria and the health unit.

The kitchen has excellent equipment, with a large gas range, a bake

oven, a meat slicer, and two double sinks. Probably the potato peeler, the steam heated double boiler where the potatoes are cooked, and the mixer, which is used for mashing boiled potatoes, all help to make the two bushels of potatoes served daily a popular part of the luncheon.

The stainless metal counters, cooking, serving and steam tables, with all other equipment, have a thorough cleaning each day.

At the end of the kitchen is a large storeroom with movable steel shelves and a six compartment refrigerator. At the other end of the kitchen is the director's office. It has a telephone connection with the main office and with the departments.

White jackets are furnished the boys who assist in the cafeteria, and the girls have white aprons.

The cafeteria is self-supporting. In every way the aim is to make it not just a convenient place in which to eat but an integral part of an educational institution.

*Optex Glass Blackboards
make my writing
easier to read*

**THEY LEARN MORE WHEN
THEY SEE MORE!**



**TRY THIS SIMPLE TEST
YOURSELF...**

Place a sample of Optex at an acute angle to a window. Mark some symbol on it. View the sample from the same acute angle that the light strikes the board, or from one that a child might view it. Notice how clear the characters stand out on the Optex Blackboard.

● This and many other tests prove the superiority of Optex Wire Glass Blackboards. Optex Blackboards simplify the problem of imparting impressions by making *all* of the writing easier to see—That's why we say—"They Learn More When They See More."

The velvet-like surface of Optex offers greater contrast to chalk, assuring solid, legible marks—eliminates "blind spots" or specular (mirror-like) reflections—and permits higher intensities of artificial illumination without any danger of eyestrain.

Optex is inexpensive to buy—economical to install—and costs nothing for upkeep. Uniformity of size, thickness and color, greatly simplify installation. It may be cut on the job in the same manner as any wire glass.

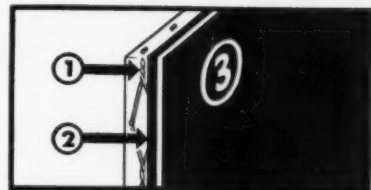
Optex is available in either black or green—standard lengths are 60" and any height up to 60". Lengths up to 120" maximum are obtainable on special order. Write for descriptive literature and samples.

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**WHAT OPTEX IS—
HOW OPTEX IS MADE**



Optex Wire Glass Blackboards are ingeniously comprised of 3 sheets of glass cast simultaneously...

- ① A base of clear glass with imbedded wire to reinforce the entire structure.
- ② An interlayer of dead-black or green opaque glass.
- ③ A thin top surface of clear glass ground and treated to provide a velvety writing finish and soften the reflected light.

While in a molten state, during the manufacturing process, these three sheets of glass are fused into one homogeneous unit.

Each piece of genuine Optex is etched in the lower left hand corner with the name "Optex."

Why Have a Lunchroom?

FRANK C. MOORE

Director of School Lunchrooms
Cleveland Board of Education

THE first thing that a school lunchroom manager should do is to make certain that he obtains the best food possible for the amount expended. In order to select food of the best quality, it is necessary to know what is wanted and how to specify what is wanted so that there are criteria for judging values.

The specification of the right food without eliminating competition is a difficult job, as food products must not only be properly specified but inspected and graded, both at the source and at the school. Government grading is the salvation of the school lunchroom. Those in charge, if they are to get the best food at the right time and at the right price, must learn to specify what they want and must be able to inspect and grade what they get so that the two are comparable.

The second essential for school lunchrooms is well-cooked food. Food not only must be well cooked, but it must be well prepared, properly cleaned, properly cooked and properly seasoned as well, if it is going to be acceptable to the customer. If school lunchroom food is not of that type, then there should not be any school cafeteria.

In considering the seasoning of food and the correct method of cooking it, cafeteria managers must always remember that they are dealing with children and, although children are different from adults, children become adults only through experience. Experiences that children acquire in the school cafeteria will be an important factor in relation to their adult life.

Having purchased the right food and cooked it properly, there remains the task of serving this food in an attractive manner. Attractively served food is garnished within limits; served in attractive portions, whether it is a roast, a salad or a vegetable; artistically and naturally displayed in clean dishes. If it is hot food, it must

be hot, and if it is cold food, it must be cold. It must be served in uniform servings so that no partiality is shown.

Cleanliness is next to godliness and, certainly, this is true in the school cafeteria. Children will never learn the value of clean food unless they eat clean food served to them in the public schools.

In connection with the serving of food, the cleanliness of the people who do the serving and the equipment in the lunchroom are important. Managers must make a special effort to see that the help has clean uniforms, clean hands, clean faces

The essentials of a school lunchroom are good food, good cooking, attractive service, cleanliness and training in proper food habits and balanced meals

and attractively arranged hair. There must be clean tables, clean chairs, a good method of taking care of dishes, good line regulations and accurate accounting of registers.

The serving of food includes many things, any one of which, if not properly handled, will spoil all previous effort. Service is something that can be attained and that does not cost money to be good. It is a question of organization and administration. Good service is possible regardless of the place in which it is done and good service is a requirement if the lunchrooms have a purpose in the schools.

A fourth point concerns proper eating. I am not sure just how it can be done, but there must be some inspection of eating. If cafeterias are going to train pupils in right habits, these habits must be a part of their

everyday life. Habits are not something talked about; they are something practiced.

Perhaps a few suggestions will be of help to lunchroom managers. Charts, posters, printed material, movies, the public address system, student council discussions, home-room discussions, all these possibilities and many more must be used continuously and effectively if the cafeteria is to accomplish any results in proper eating.

The lunchroom department must become the laboratory of the home economics room. All the things discussed here must be practiced daily. Proper eating is a reason for the school lunchroom and if lunchroom managers do not accept this as a part of their responsibility they are not accepting what the school lunchroom can do for pupils today.

The fifth point concerns balanced meals. Current diet fads are likely to destroy perspective on the proper foods. All this propaganda results in confusion and in little knowledge of what balanced meals should consist.

The school lunchroom should teach balanced meals through properly balanced specials, attractively served and advertised.

A testing kitchen, such as the one at West Technical High School in Cleveland, is an essential for a large school system. Here the cafeteria employees learn food combinations; learn how to cook the food; learn how to apportion it; how to set up standard recipes, and how to make it possible for all schools in the system to benefit by one experiment.

Tested uniform recipes of specials, planned by season, planned in advance and reasonable in price, will greatly aid in education for balanced meals. Discussions and demonstrations should be held at P.T.A. meetings and before school groups to emphasize the fact that a balanced meal will do much more for the development of the human body than all the food products they hear advertised these days on the radio.



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to College...*



The Trapp Family Choir, unique Austrian family group which has captured the imagination and critical applause of musical America. They record exclusively for Victor.

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AMONG recent recordings much in demand in schools is the Victor Album "Early Choral Music" sung by the Trapp Family Choir. Invaluable as a living lesson on the sacred and secular music of the 15th, 16th, and 17th Centuries, this album is typical of the fine music Victor makes available to educators.

Working together with prominent educators in music and with famous musicians, Victor has assembled a vast library of records that carry education in music from elementary grades up through college. Contained in the catalog of Victor Records for Elementary Schools is a listing of all the music you need to afford young children a real background in music appreciation. Records

suitable for High Schools and Colleges are listed in the general catalog of Victor Records.

We'll gladly send you absolutely free a copy of the catalog of Victor Records for Elementary Schools if you'll send in the coupon below. Note that you can also secure a free copy of Sound Service for Schools, giving you complete information about the new RCA Victor School Sound Systems. And, if you'll send fifteen cents to cover handling and mailing costs, we'll send you the famous Victor Record Catalog listing more than 7,500 selections.

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USE THIS COUPON

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Please send me without cost:

1. Catalog of Victor Records for Elementary Schools
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I am enclosing fifteen cents. Please send me the new Victor Record Catalog. ☐ Check this square if enclosing stamps or money

BETTER PLANT PRACTICES



In Pike County, Ky.

It will take only a few minutes to talk with Amos Runyan, secretary, Pike County board of education, Pikeville, Ky., about summer maintenance. He has a project that is well worth hearing about—a group of N.Y.A. boys who beautify and repair school property.

Go on from there, Mr. Runyan.

"These young men are furnished with a truck, tools and materials with which to work and are sent out over the county to the various school buildings to check and make renovations and repairs that are needed. They are paid by the U. S. government under the general relief program; therefore the item of labor costs the board of education nothing."

Safer Transportation

Dale County, Alabama, of which Ozark City is the county seat, boasts today a fleet of no less than 36 buses. Some twelve years ago, it seems, the county inaugurated a program of school consolidation, and each of the 15 schools listed has taken the place of two to four of the old schools, mostly "one roomers." Before the board of education became bus-minded, pupils were transported in a variety of vehicles operated on individual contracts. The change to a publicly owned fleet of buses has resulted in safer and more economical operation to say nothing of a more direct control of drivers, according to P. W. Lett, superintendent of the Dale County board of education, who is in charge.

Great care is exercised in selecting

drivers, Mr. Lett will tell you. What is more, they are being reminded continually of the importance of their work and the necessity of heeding all safety precepts. When they make out their monthly reports, for example, they must answer various questions regarding safe driving and care of the buses, as contained in the blank reproduced.

Mr. Lett takes great pride in pointing to the garage, 220 feet long and 60 feet wide, which houses the entire fleet. Here the visitor is shown a service shop where one full-time mechanic and a part-time assistant are employed. Gasoline and oil are transported to the buses at each school in a truck which is utilized as a service unit.

Care of the Flag

Sometimes our flag does not receive the attention it merits at the hands of school custodians. It should never be displayed or stored in any way that will permit it to become soiled or dam-

aged. When it gets torn, it should be mended at once.

Lester B. Robertson, custodian in charge of the Guernsey Consolidated Schools, Guernsey, Wyo., urges that some thought be given to the care of the flag. For example, "Often custodians will carelessly fold it after it is taken down at sunset and will lay it upon or behind the radiator in the vestibule, a convenient place for the next morning. This should never be done. School flags are made of wool bunting, which contains a free natural oil called lanolin. Not all of this oil is removed during the process of manufacturing, as it tends to make wool more waterproof. Repeated heating from the radiator, however, causes evaporation, leaving the wool dry and lifeless."

Another thing to remember: "The flag should never be permanently affixed so that lowering is impossible. Always raise it briskly at sunrise and lower it slowly at sunset on all school days, as well as on national and state holidays. During stormy weather an older flag can sometimes be displayed.

"And if it becomes necessary to destroy the flag after it is worn out, burn it as a whole—and privately."

Beauty Hints for Mops

There is a right way and a wrong way to clean a yarn mop, as there is everything else. It is suggested by a school custodian who has learned from experience that the water should be boiling hot so it will cut the grease and dirt. If by chance a steam boiler is available, run a small steam line from the boiler into a 15 gallon oil drum, about 8 inches from the bottom of the drum. Next a piece of hail screen should be fitted in the drum and put on legs to keep it about 6 inches from the bottom so that the mops will not lie in the dirt. The drum is then filled about three-fourths full of water and ¼ pound of cleaning powder and ½ pint of neutral soap are added. The mops are then put in, a few at a time, and the steam turned on lightly, just enough to keep the water boiling. The mops should be stirred around several times and kept in until clean. When ready to come out, one at a time, they are put into a wringer scrub bucket partly filled with clean water, after which they are hung up to dry.

DALE COUNTY PUBLIC SCHOOLS MONTHLY REPORT OF TRUCK DRIVERS

Truck from _____ to _____
 For _____ Month, Beginning _____ Ending _____, 193____
 No. pupils hauled: Grades 1-6 _____; Grades 7-12 _____; Total _____
 Number gallons gas used this month _____
 Number quarts oil used this month _____
 Number days truck was operated by driver _____
 Number days truck was operated by substitute driver _____
 Name of substitute _____
 Number times late in delivering children to school _____
 Cause: _____
 Have you driven over 30 miles per hour? _____
 Have you "flagged" all railway crossings? _____
 Have you kept your truck clean inside and out? _____
 Have you gone over truck to tighten bolts at least once weekly? _____
 Has your truck been under shelter each night? _____
 Has your truck been used for any purpose other than to transport children to and from school? _____
 Number of miles traveled this month _____
 Length of your route, one way, in miles _____

I hereby certify that the above report is correct, that I have driven or paid substitute for driving _____ days, and that I am due the sum of \$_____.

(Signed) _____
 Driver

The above report, so far as I know, is correct.

(Signed) _____
 Principal

 School

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Specify APSCO

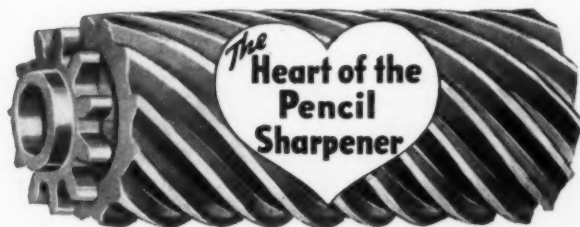
PENCIL SHARPENERS



PROVED FOR BEST PERFORMANCE—PROVED FOR
LONGEST LIFE OF DEPENDABLE SERVICE

For every school use, APSCO Automatic Pencil Sharpeners have proved themselves: for quiet, fast-cutting, non-wasting performance . . . for lasting, year-after-year, dependable service.

The proof itself is simple: Only APSCO Cutters give you the correct number of non-clogging, hollow ground cutting edges — combined with great durability. And these knife-like edges *cut* — they *never* scrape!



Check school purchasing records. You'll find that 85, of every 100, school buyers in America specify APSCO — made by the world's largest manufacturer of pencil sharpeners.

Select the pencil sharpener that fits your requirements. Write TODAY for your FREE copy of the folder of APSCO Automatic Pencil Sharpeners for school use.

**SCHOOLS USE MORE APSCO
PENCIL SHARPENERS THAN
ALL OTHER MAKES COMBINED**

AUTOMATIC PENCIL SHARPENER DIVISION
SPENGLER-LOOMIS MANUFACTURING COMPANY, CHICAGO, ILLINOIS

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You can't judge their quality and worth by surface appearances alone. Sometimes the best looking diamonds have flaws—not visible to the naked eye—which detract materially from their value and utility. Much the same is true with Band Instruments. Outwardly they all look pretty much alike. It's what goes into them—how they're built—how they'll play—how they'll last—that counts most. You want instruments that you can depend on to give lasting satisfaction and the most economical service... instruments that because of their superior tone and playing qualities will be of the greatest possible aid to your students and help them "get off to a flying start" in music.

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See your local Martin dealer—or write today for new Catalog and let us show you why Martins are a better buy in every way. A complete range of instruments to satisfy every budget.

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Elkhart, Indiana

News in Review

Visual Technic in Reading

The reading skill and scholastic standing of a group of 16 Harvard University freshmen showed marked improvement after eight weeks of special training in the first experimental test of a new motion picture technic for training in reading, developed at the university graduate school of education.

The new technic forces the eyes of the spectator to follow the movements on the screen that a skillful reader's eyes would follow. The movie shows successive phrases flashed rapidly across and down the screen in such a way that the reader's eyes are involuntarily attracted to each group of words.

Under the training, the students as a group increased their reading speed by 50 per cent, gained in reading accuracy and altered for the better their habits of eye movement. That they should as a group improve in scholarship also was considered significant, because of the many factors other than reading ability that contribute to college grades. The experiment will be repeated next fall to observe how permanent the results may be.

Prof. Walter F. Dearborn, director of the Harvard Psycho-Educational Clinic; Dr. Irving H. Anderson, instructor in education, and James R. Brewster, director of the Harvard Film Service, who have developed the technic, say it can be used by any individual or institution possessing an ordinary 16 mm. projector.

The Harvard Film Service is now ready for distribution of this material to high schools and colleges. This month films will be ready for training children of the third to fifth grades; and by fall, for grades six to nine.

Photographs of eye movements showed that the experimental group increased its reading speed on the average from 251 to 382 words a minute during the training period, Doctor Anderson reported. The number of eye-fixations, or stops, per line of reading was reduced from 10.8 to 6.5 and the average number of regressions, from two every three lines to one every two. Progress of the experimental group was compared with the records made by a control group of 16 freshmen with similar admission records, which was given no special training. Comparison of midyear with November grades showed that while 10 students in the experimental group had made definite improvement, only five of the "control" group had better records.

Through photographs of the lightning-like movements of the eyes in reading, scientists have found that in reading a line of type the eyes do not move steadily but make several stops of about a quarter-second duration. During the instant of each halt, a word or phrase comes into distinct focus and is comprehended; then the eyes move on to the next stop.

Between a slow and a fast reader, psychologists have found, the main difference lies in the number of stops per line. A slow reader makes many halts, ordinarily about eight or ten to the average line of type and is also likely to go back and reread phrases and sentences. On the other hand, the skillful reader usually makes about five stops in a line of average length and difficulty, since at each halt he may take in a phrase of two or three words or more.

SUMMER COURSES

Stanford Education Conference

John W. Studebaker, Jesse Newlon, Howard Odum, Lewis Terman and other outstanding speakers will discuss challenges on educational and social frontiers and newest educational thought and practices at the Stanford University School of Education conference on "Educational Frontiers," July 7 to 9, immediately following the summer N.E.A. meetings.

Offers Broadcasting Course

A new radio broadcasting course, designed to acquaint educators with the technics of preparing and broadcasting educational radio programs, as well as to inform them of the details of present day broadcasting methods, is scheduled for the first term of the 1939 summer session at the University of Kentucky. A practical feature will involve actual work in educational broadcasts. The students will prepare the continuities, which will be cast, rehearsed and finally broadcast over various Kentucky stations.

Business Education Conference

"The Pros and Cons of Consumer Education" will be the theme of the fifth annual Business Education Conference of the University of Denver, June 28 and 29. Topics regarding the controversial issues of consumer education will be discussed by leaders in the fields of business and of education at the opening session on June 28. The following morning will be given

to visitation and observation at East High Summer School and the Progressive Education Workshop.

A motor tour of the near-by mountains will be conducted in the afternoon, with a stop on Genesee Mountain for an all-school picnic.

Curriculum Workshop

A curriculum workshop in secondary education will be a distinctly new feature of the summer session of Syracuse University, according to Dr. Harry S. Ganders, dean of the school of education. Syracuse is one of the ten institutions selected to receive the cooperation of the committee on workshops and field service of the Progressive Education Association during the 1939 summer session.

Approximately 100 students will be admitted on an invitational basis for study in English, social studies, science, home economics, mathematics and guidance. Only administrators and teachers who are giving leadership in curriculum reorganization in their own schools and who have a definite problem will be invited.

There will be no formal classes or lecture courses.

Brazilian Study

Opportunity for study in Brazil this summer is being offered by the University of Pennsylvania as part of its summer school program. The courses, which will be conducted in English, will be open to undergraduate and graduate students seeking regular university credit and will center chiefly upon problems in comparative education.

At least three courses in education will be given in Rio de Janeiro by University of Pennsylvania faculty members who will accompany the students to Brazil. The courses will be flexible, however, and will interest teachers and administrators seeking first-hand contacts with the Brazilian education system.

During the voyage, classes will be conducted aboard ship. The Brazilian government is making arrangements whereby each student may be quartered in the home of an English-speaking Brazilian. Brazilians who are authorities in various fields also will offer special lectures supplementing the regular curriculum.

OCCUPATIONS

"Know Your Job" Programs

A fresh approach to the important business of selecting a career was received enthusiastically on Saturday, March 4, by representatives of 80 "Ca-

reer and Self-Appraisal classes" from 30 Chicago high schools. The pupils, along with a number of instructors and interested observers from other school systems, crowded the large C.B.S. audience studio in Chicago to hear the first of a new series of "Know Your Job" programs.

A discussion session held after the broadcast lasted more than forty-five minutes with pupils in the audience asking questions on the mail order business from J. B. Hattersley, vice

president in charge of operating, and I. R. Andrews, personnel director of the mail order division of Sears Roebuck and Company in Chicago.

The new series is designed to allow pupil participation in the weekly "Know Your Job" broadcasts, to be followed by a discussion period during which members of the audience may question the experts from various fields acting as guests on the program.

Five programs that began the new cycle dealt directly with the mail order



YOU GET MORE for your money from Neo-Shine because it has a wax content 50% greater than any ordinary non-buffing wax.

In addition, Neo-Shine's ingredients—No. 1 Carnauba Wax, our special emulsifier, and bleached, bone-dry shellac—are correctly balanced. Thus, Neo-Shine's wax film is sufficiently durable to withstand the hardest wear—a film *soft* enough to prevent powdering or marring, yet *hard* enough to give a smooth dirt-repelling surface that *stays bright*.

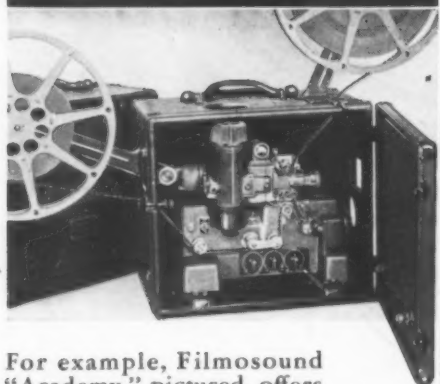
That is why one application alone lays a beautifully-lustrous, traffic-resisting wax film that lasts *twice* as long.

You owe it to your school to investigate Neo-Shine. For you can't buy a more lasting or more economical floor wax—at any price. Try it—*now!*

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**YOU EXPECT MORE
FROM A
Filmosound
...and you get more!**



For example, Filmosound "Academy," pictured, offers twice the sound volume of similarly priced classroom projectors. That's why it gives you auditorium service, too!

The "Academy" projects BOTH sound and silent 16 mm. films. It has provision for using BOTH a microphone and a phonograph turntable.

You get *exclusive* features in the "Academy": "floating-film" protection; costly three-sprocket construction to eliminate "flutter"; metered lubrication; positive gear drive. These—and many more—all to provide easy operation, low maintenance cost, and lasting dependability.

With powerful 750-watt lamp, 1600-foot film capacity, the "Academy" costs but \$298. Complete details on all Filmosounds on request.

Rent Hollywood Hits

Such grand Universal films as *Magnificent Obsession*, *My Man Godfrey*, and *Snow Boat* have been released on 16 mm. film and can now be obtained for school showings through the Filmosound Library exclusively. Write today for new, free catalog describing and pricing over 1000 sound films on all subjects. Bell & Howell Company, Chicago; New York; Hollywood; London. Established 1907.



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BELL & HOWELL COMPANY
1855 Larchmont Ave., Chicago, Ill. HS 4-39
Send details on () Filmosound School Projectors. Include () Filmosound Library Catalog of 1000 films.

We now have (number and make).....

.....sound projectors.

Name.....

School.....

Address.....

City.....State.....

PRECISION-MADE BY

BELL & HOWELL

field. The March 4 program was devoted to a general over-all view of the field. The three programs broadcast on March 11, March 18 and March 25 traced a typical order through a mail order house to observe the workers at their various tasks. The April 1 program takes up related work in the industry.

Index Off the Press

The 1938 volume of the *Occupational Index*, just published by the National Occupational Conference, contains 1751 new references to literature on 300 occupations. The index is complete with cumulative subject, author and title indexes.

VISUAL EDUCATION

Wayne University Adds Courses

Wayne University, Detroit, has added two new courses in visual education and radio to its curriculum. One is a practical course designed for teachers who are interested in both radio appreciation and performance. The second course presents a general picture of the problems of motion picture and radio, both from the standpoint of the

producers and of the consumers. Field trips to radio stations and motion picture companies in Detroit are part of the course.

Three New Government Films

Three new government produced sound motion pictures are available for nontheatrical distribution in both 16 and 35 mm. sound editions, the United States Film Service, a division of the National Emergency Council, has announced.

"The River," "Good Neighbors" and "Three Counties Against Syphilis" are to be distributed by the Film Service.

"The River," a three reel documentary film dramatizing the Mississippi River, has been shown extensively in commercial motion picture theaters during the last fifteen months. It won the international award as the world's finest documentary film at the 1938 International Exposition of Cinematographic Art.

"Good Neighbors," a two reel subject produced by the U. S. Maritime Commission, depicts the launching of the "Good Neighbor Fleet" which marked the inauguration of east coast service to South America.

"Three Counties Against Syphilis," a two reel film made by the U. S.

Films for the School Screen

Health

Exercise—Development of the muscles; strengthening of digestive organs, chest and lungs; value of swimming. 1 reel. 16 and 35 mm., silent. For purchase. DeVry Corporation, 1111 Center Street, Chicago.

General Personal Hygiene—Standards of health promotion, exercise, good air, sunshine, sleep, cleanliness, footwear, care of teeth, eyes, hair, mental health and heredity. Science of Life Series. 1 reel. 16 and 35 mm., silent. For rent or for purchase. Bray Pictures Corporation, 729 Seventh Avenue, New York City, or Films, Inc., Dept. W., 330 West Forty-Second Street, New York City.

Drinking Health—How nature provides for quenching our thirst; the great government enterprises established to supply us with pure drinking water; the needs and uses of water by the human body; the dangers of contamination from unclean drinking vessels and how to avoid these dangers. 2 reels. 16 and 35 mm., silent. For rent. Films of Commerce Co., Inc., 21 West Forty-Sixth Street, New York City.

Food Makes a Difference—Results of proper nutrition for children; how laboratory tests are conducted to determine the effects of various foods; development and growth of flesh and bone. 2 reels. 16 mm., silent. For rent. Visual Education Service, 131 Clarendon Street, Boston.

Body Framework—How the skeleton determines shape and size of the body; how it protects the vital organs; details of bone structure and composition; changes during growth; mending a fractured bone; relation of sunlight and cod liver oil to bone development and joint action. 1 reel. 16 mm., silent. For purchase. Eastman Kodak Company, Teaching Films Division, Rochester, N. Y.

Heart and Circulation of the Blood—Mechanics of the pulmonary and systemic systems; delineation of the heart action; amplified heart beat sounds; microscopic scenes of capillary action; blood pressure and its relation to health; animated drawings. 1 reel. 16 and 35 mm., sound. For sale. Erpi Picture Consultants, Inc., 250 West 57th St., New York.

Films in Review

The photography is of a quality rarely excelled. Enlarged views of individual coral organisms and of the internal activities of organisms are particularly effective. The sound track is poor for teaching purposes. Many teachers will probably prefer to run the film silent, furnishing their own comments.—*Reviewed by a committee comprised of* H. EMMETT BROWN, ROSE WYLER, N. ELDRÉD BINGHAM and F. T. HOWARD, *all of Teachers College, Columbia University; F. M. WORRELL, Englewood High School, Englewood, N. J., and HERBERT ZIM, Ethical Culture School, New York City.*

Analysis of 40 replies to a questionnaire sent to 62 public high schools owning Hammond Organs

- | | | | |
|-------------------------|--|-------------------------|---------------------------------|
| Accompany choirs | <u>1794 1794 1794 1794</u> | Holiday programs | <u>1794 1794 1794 1794</u> |
| Accompany glee clubs | <u>1794 1794 1794 1794 1794</u> | May Day exercises | <u>1794</u> |
| Accompany soloists | <u>1794 1794 1794 1794 1794</u> | Mealtime music | <u>1794</u> |
| Adult education courses | <u>1794</u> | Memorial programs | <u>1794 1794</u> |
| Appreciation programs | <u>1794 1794 1794</u> | Music for operettas | <u>1794 1794 1794</u> |
| Assemblies | <u>1794 1794 1794 1794 1794 1794 1794 1794</u> | Music for plays | <u>1794 1794 1794 1794</u> |
| Augment bands | <u>1794 1794 1794</u> | Organ instruction | <u>1794 1794 1794 1794</u> |
| Augment orchestras | <u>1794 1794 1794 1794 1794</u> | Organ practice | <u>1794 1794 1794 1794 1794</u> |
| Basketball games | <u>1794</u> | Organ recitals | <u>1794 1794 1794 1794</u> |
| Chapel services | <u>1794 1794 1794</u> | Outdoor concerts | <u>1794</u> |
| Commencement exercises | <u>1794 1794 1794 1794 1794</u> | Rallies | <u>1794</u> |
| Community meetings | <u>1794 1794 1794 1794</u> | Sound effects for plays | <u>1794 1794</u> |
| Community singing | <u>1794 1794 1794 1794</u> | Student dances | <u>1794</u> |
| Concerts | <u>1794 1794 1794 1794 1794</u> | Student teas | <u>1794</u> |
| Faculty gatherings | <u>1794</u> | Student Union | <u>1794</u> |
| Football games | <u>1794</u> | Study of acoustics | <u>1794</u> |
| Gymnasium music | <u>1794</u> | Study of sound | <u>1794</u> |
| | | Vesper services | <u>1794</u> |

Movies 1	Study of electricity 1
Outdoor pageant 1	Study of arrangements
Radio broadcast 11	(honorary) 1

- [illegible]

- Yes /// /// /// /// No /// ///

- Yes ~~///~~ No ~~///~~ ~~///~~ ~~///~~ ~~///~~ ~~///~~

- | | |
|------------------------------|---------------------|
| Best investment we ever made | 1 |
| Very much so; Decidedly | 1774 1774 1774 |
| yes | 1774 1774 1774 1774 |
| Too new to comment | 111 |
| not yet | 1 |

City _____ State _____

You may not go to jail but—

Officers of schools and playgrounds are expected to use every reasonable means to insure safety of the children. Continental Chain Link fence is the modern protection for property and children. It's the only fence made of KONIK steel—for greater strength and for rust resistance clear through. It has heavier posts, fittings and bracings, most modern gates and accessories, etc. Write for manual "Planned Protection."

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CONTINENTAL Chain Link FENCE

On the Air During April

The following programs of particular interest to school people are arranged by the Columbia Broadcasting System and the National Broadcasting Company. All programs are listed in Eastern Standard Time. Watch listings for your local outlets.

Daily

12:30-1:15 p.m.—National Farm and Home Hour (NBC Blue).¹

Sunday

10:30-11:00 a.m.—Music and American Youth, programs given by public school children from cities all over the country (NBC Red).

12:30-1:00 p.m.—University of Chicago Round Table (NBC Red).

1:00-2:00 p.m.—Great Plays, masterpieces of the drama (NBC Blue).

April 2—The Blue Bird, Maeterlinck.

April 9—Justice, Galsworthy.

April 16—Back to Methuselah, Shaw.

April 23—Oliver Cromwell, Drinkwater.

April 30—White Headed Boy, Robinson.

May 7—Elizabeth the Queen, Anderson.

2:00-2:30 p.m.—Americans All, Immigrants All, sponsored by the U. S. Office of Education. Dramatization of the contributions which the successive waves of immigrants have brought to the United States, written by Gilbert Seldes (CBS).

3:00-5:00 p.m.—New York Philharmonic Symphony Orchestra, John Barbirolli, conducting (CBS).

4:30-5:00 p.m.—The World Is Yours, dramatic series sponsored by the Smithsonian Institution (NBC Red).

7:00-7:30 p.m.—The Peoples' Platform, dinner guests of Prof. Lyman Bryson of Columbia University from all walks of life talk over current questions (CBS).

8:00-9:00 p.m.—This Is New York (CBS).

10:30-11:00 p.m.—Headlines and Bylines. Comments on world affairs by H. V. Kaltenborn, Ralph Edwards (CBS).

Monday

2:00-2:30 p.m.—Adventure in Reading (NBC Blue).

2:30-3:00 p.m.—American School of the Air, "Frontiers of Democracy," vocational guidance. A series of programs based on the report of the National Resources Committee dealing with trends in industry and population (CBS).

3:00-3:45 p.m.—Rochester Civic Orchestra (NBC Blue).

5:45-6:00 p.m.—"New Horizons," sponsored by the American Museum of Natural History (CBS).

6:00-6:15 p.m.—Science in the News (NBC Red).

7:45-8:00 p.m.—Science on the March (NBC Blue).

10:30-11:00 p.m.—National Radio Forum (NBC Blue).

Tuesday

12:45-1:15 p.m.—Music Makers, conducted by Dr. Joseph E. Maddy. Elementary, 12:45-1:00 p.m.; advanced, 1:00-1:15 p.m. (NBC Red).

1:30-1:45 p.m.—General Federation of Women's Clubs, consumers' program (NBC Red).

2:00-2:30 p.m.—Science Everywhere. Junior science. Elementary, 2:00-2:15 p.m.; advanced, 2:15-2:30 p.m. (NBC Blue).

2:30-3:00 p.m.—American School of the Air, "Music and Its Friendly Arts." Columbia's Symphony Orchestra and noted commentators in a musical series correlating music with the dance, poetry and prose, drama, opera and architecture (CBS).

Wednesday

2:00-2:30 p.m.—Your Health, sponsored by the American Medical Association (NBC Blue).²

HEALTH EDUCATION

April 5—Don't Believe Everything!

April 12—Learning to Live.

April 19—"Accidents Don't Just Happen—"

April 26—What Is a Doctor?

2:30-3:00 p.m.—American School of the Air, "New Horizons," science and geography. Roy Chapman Andrews, director, American Museum of Natural History, and other noted explorers in talks and dramatizations of scientific and geographic expeditions (CBS).

4:00-4:15 p.m.—Of Men and Books, review comments by Prof. John T. Frederick, Northwestern University.

5:15-5:30 p.m.—So You Want to Be—Possible careers for high school pupils (CBS).

5:45-6:00 p.m.—Exploring Space, sponsored by the American Museum of Natural History (CBS).

6:00-6:15 p.m.—Our American Schools, dramatizations tracing growth and development of the nation's school system, Belmont Farley, narrator (NBC Red).

9:30-10:00 p.m.—Wings for the Martins. What modern education has to say on the problems of children and youth in "finding their wings." Sponsored by the U. S. Office of Education and the National Congress of Parents and Teachers (NBC Blue).

Thursday

2:30-3:00 p.m.—American School of the Air, "This Living World" (CBS).

8:30-9:15 p.m.—Eastman School of Music Orchestra under the direction of Dr. Howard Hanson and Paul White will be heard on April 6, 20 and 27 (NBC Blue).

9:30-10:30 p.m.—America's Town Meeting of the Air, George V. Denny Jr., moderator (NBC Blue).

10:00-10:30 p.m.—Columbia Workshop, experiments in drama (CBS).

10:30-11:00 p.m.—Americans at Work, interviews with workers in representative jobs. CBS adult education series.

Friday

2:00-3:00 p.m.—Walter Damrosch Music Appreciation Hour (NBC Blue).

2:30-3:00 p.m.—American School of the Air, "Tales From Far and Near," literature. Narration and dramatization of modern children's stories, with guest authors (CBS).

10:45-11:00 p.m.—American Viewpoints program (CBS).

Saturday

10:30-10:45 a.m.—Florence Hale's talks, directed to parents, explaining methods of classroom procedure so that education may continue at home as well as in school (NBC Red).

10:45-11:00 a.m.—The Child Grows Up (NBC Blue).

11:00-12:00 noon—Cincinnati Conservatory of Music. New York Philharmonic Children's Concert alternates on third Saturday of each month (CBS).

11:00-11:30 a.m.—No School Today, a new safety program for children (NBC Red).

11:30 a.m.-12:00 noon—Milestones in the History of Music, Eastman School of Music program (NBC Red).

12:00 noon-12:25 p.m.—American Education Forum. Conducted by Dr. Grayson Kefauver, professor of education, Stanford University (NBC Blue).

12:00-12:30 p.m.—NBC Music Guild (NBC Red).

5:00-5:30 p.m.—"What Price America," U. S. Department of Interior program presenting the fight to regain natural resources in dramatized form (CBS).

6:15-6:30 p.m.—Adventures in Science, sponsored by Science Service, with Watson Davis (CBS).

7:30-7:45 p.m.—Lives of Great Men, Dr. Edward Howard Griggs (NBC Red).

10:00-11:30 p.m.—NBC Symphony Orchestra under direction of Arturo Toscanini (NBC Blue).

¹Except Sunday.

²Owing to program conflicts, there will be no Chicago broadcast of the network program. Instead, a recording of the program will be broadcast over Station WENR at 8 p.m. each Wednesday.

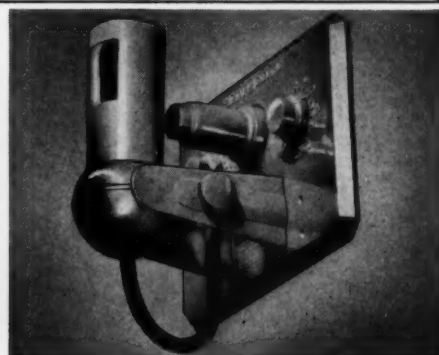
LIGHTING EXAM for SCHOOLMEN



1 What is "good school lighting"? An average illumination of 20 footcandles, with the minimum set at 15, provided without objectionable shadows or glare. These recommendations are based on tests like that shown above, in which a Visibility Meter is used to determine correct light for easy reading.



2 What is one example of good modern lighting? Good lighting for classrooms is provided by several types of indirect and semi-indirect lighting units having a low surface brightness. Above picture shows a recent installation at Edgewood Junior High School, Ashtabula Township, Ohio, using 500 watt lamps in 6 indirect luminaires.



3 Isn't daylight enough? Daylight is generally sufficient for pupils near windows, but usually leaves other children in comparative gloom. Best solution is good artificial lighting with automatic "electric eye" control (above) developed by G.E. It turns lights on or off depending on amount of daylight available. Cost per room is surprisingly low.



4 Why is it important to choose lamp bulbs with care? Because the amount of light you get for current consumed depends entirely on the efficiency of the lamp. G-E MAZDA lamps must undergo 480 tests and inspections for quality. This year they give more light than ever.



5 How can I learn more about school lighting? By writing today for your free copy of General Electric's school lighting manual. "The new Knowledge of seeing in the Classroom". Address Incandescent Lamp Department, Dept. 166-NA-D, General Electric Co., Cleveland, Ohio.

GENERAL ELECTRIC

PPROMPT care is important in preventing infected wounds. Even minor wounds may become infected when antiseptic treatment is delayed. Children and adults report injuries promptly when Mercurochrome is used, because treatment is not painful.

Mercurochrome, H. W. & D.
(Dibrom-oxymercuri-fluorescein-sodium)

is non-irritating and exerts bactericidal and bacteriostatic action in wounds. Be prepared with Mercurochrome for the first aid care of all minor wounds and abrasions. In more serious cases, consult a physician.

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After a thorough investigation of the evidence for and against at the close of the last period of acceptance, the Council on Pharmacy and Chemistry of the American Medical Association again reaccepted (1935) **MERCUROCHROME, H. W. & D.**
(Dibrom-oxymercuri-fluorescein-sodium)

MEETINGS

Exhibitors Name Officers

J. A. Campbell of the Kewaunee Manufacturing Company was chosen president and Paul L. Crabtree of Caproni Galleries was reelected secretary-treasurer of the Associated Exhibitors of the N.E.A. Two new directors are H. C. Grubbs of Erpi Picture Consultants, Inc., and Miles C. Holden of the Holden Patent Book Cover Company. Five thousand delegates to the A.A.S.A. meeting in Cleveland last month witnessed the presentation of the 1939 American Education Award to Dr. Payson Smith.

Oberholtzer Heads Rotary Club

E. E. Oberholtzer, superintendent of schools, Houston, Tex., was elected president, and S. T. Neveln, superintendent at Austin, Minn., was reelected secretary-treasurer for the seventeenth time, of the Schoolmasters' Rotary Club at its annual meeting in Cleveland during the A.A.S.A. convention. At an overflow gathering, 1000 schoolmen heard an address by Walter D. Head of Montclair Academy, Montclair, N. J., who is a candidate for the presidency of Rotary International.

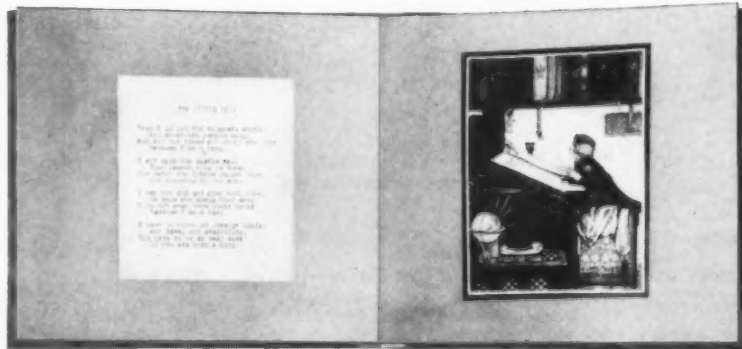
Coming Meetings

- April 6-8—Tennessee Education Association, Nashville.
 April 8—California Teachers Association, Palace Hotel, San Francisco.
 April 10-14—Association for Childhood Education, Atlanta, Ga.
 April 12-14—National Catholic Educational Association, Washington, D. C.
 April 12-15—Kentucky Education Association, Louisville.
 April 13-14—Michigan Rural Teachers Association, Greenville.
 April 15—Massachusetts Teachers Federation, Boston.
 May 1-3—Institute for Education by Radio, Ohio State University, Columbus.
 June 15-17—School Administrators' Conference, Peabody College, Nashville, Tenn.
 June 19-22—National Conference on Visual Education, Chicago.
 July 2-6—National Education Association, San Francisco.
 July 3-6—National Convention of Student Officers and Advisers, San Francisco.
 July 7-9—Conference on "Educational Frontiers," Stanford University, Calif.
 July 8-21—Conference on Elementary Education, University of California, Berkeley.
 July 10-21—School Executives' Conference, University of California, Berkeley.
 August 6-11—World Federation of Education Associations, Rio de Janeiro, Brazil.
 Oct. 6-7—Colorado Education Association, district meeting at Durango.
 Oct. 12-13—Minnesota Education Association, northeast division, Duluth.
 Oct. 12-14—Utah Education Association.
 Oct. 16-20—National Association of Public School Business Officials, Cincinnati.
 Oct. 19-20—Minnesota Education Association, division meetings at St. Cloud, Bemidji, Winona, Mankato, Moorhead.
 Oct. 19-21—South Dakota Education Association, district conventions at Sioux Falls and Aberdeen.
 Oct. 25-27—North Dakota Education Association, Bismarck.
 Oct. 26-27—Indiana State Teachers' Association, Indianapolis.
 Oct. 26-27—Maine Teachers' Association, Lewiston.
 Oct. 26-28—Rhode Island Institute of Instruction, Providence.
 Oct. 26-28—Montana Education Association, district conventions at Miles City, Livingston, Missoula, Great Falls and Glasgow.
 Oct. 26-28—South Dakota Education Association, district conventions at Pierre and Deadwood.
 Oct. 26-28—Colorado Education Association, district meetings at Denver, Pueblo and Grand Junction.
 Oct. 27-28—Maryland State Teachers' Association, Baltimore.
 Nov. 1-3—West Virginia Education Association, Wheeling.
 Nov. 2-3—Minnesota Education Association, Minneapolis and St. Paul divisions, Minneapolis.
 Nov. 2-4—Iowa State Teachers Association, Des Moines.
 Nov. 3-4—Arkansas Education Association, Little Rock or Hot Springs.
 Nov. 3-4—Kansas State Teachers Association, Topeka, Salina, Hays, Dodge City, Wichita and Pittsburg.
 Nov. 15-18—Missouri State Teachers Association, St. Louis.
 Nov. 16-18—Arizona Education Association, Phoenix.
 Nov. 21-24—Virginia Education Association, Richmond.
 Nov. 27-28—New York State Teachers Association, house of delegates, Albany.
 Nov. 30-Dec. 1—National Council of Teachers of English, New York City.
 Dec. 1-2—Texas State Teachers' Association, San Antonio.

New... Children's Scrap Books in Bright, Attractive Colors

THESE strong, brightly-colored scrap books will be very popular in the children's department of your library. Each book contains 20 pages of heavy, colored kraft paper, and each page is reinforced with cloth at the hinge. They will wear extremely well.

The covers are made of a new board and come in three colors—red, green and blue with silver veining. The inside pages are in corresponding colors. Sizes 10 x 8 inches and 12 x 10 inches. When ordering, specify colors and sizes.



Prices

Quantities	Size 10" x 8"	Size 12" x 10"
3 scrap books.....	\$.29 ea.	\$.36 ea.
6 scrap books.....	.27 ea.	.34 ea.
12 scrap books.....	.25 ea.	.32 ea.
36 scrap books.....	.23 ea.	.30 ea.

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JOHNSON'S TRAFFIC WAX (Paste or Liquid) the tough, long-wearing polishing wax gives floors lasting beauty.

Both of these products are specially made to withstand heavy traffic.

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INSTRUCTION

Chef Heads Cookery Class

A trade class for chefs and cooks is included in the courses of the new west side trade school opened recently in Detroit. Herman Breithaupt, former supervising chef of a Great Lakes passenger boat line, is the instructor. This is said to be the first class in commercial cookery to be organized in the Detroit area.

Young Executives' Fellowship

Ten young executives' fellowships for a year's graduate study at the Massachusetts Institute of Technology are being made available by the Alfred P. Sloan Foundation of New York beginning in June. The foundation's grant of \$32,500 is more than double last year's gift for the same purpose. It now opens to nation-wide competition these fellowships, with stipends up to \$2750. Large and small corporations in many sections already are nominating candidates among their employees for the fellowships.

Protest New College Closing

The announcement of the unexpected closing of New College, which is the experimental undergraduate di-

vision of Teachers College, Columbia University, has brought a storm of protest from educators all over the country.

One hundred and fifty educators, representing colleges and universities, have signed a petition urging Dean William F. Russell of Teachers College to keep New College from closing next fall. In the petition the educators declared that New College is equipping prospective teachers with "much needed leadership in professional thinking and practice."

The petition went on to state that "the training of competent, human, socially minded teachers, intimately acquainted with children and the conditions of their everyday life, is perhaps the crux of the entire problem of education in this country," and that New College is undertaking this job "with notable facilities and success."

Kept From College

Chiefly because of lack of funds, 47 per cent of South Carolina high school graduates who have "definite academic promise" never reach college. These data are based upon the annual South Carolina high school and college freshman testing program. Findings from the testing programs emphasize the need for scholarship provisions for outstanding high school graduates, Prof.

W. C. McCall, director of the student personnel bureau, said. Freshmen who enter the university do not constitute "an economically fortunate group," Professor McCall said.

Scholarships to U.S.C.

The University of Southern California is offering 35 tuition scholarships to high school pupils and junior college students throughout the country during the 1939-40 academic year, President Rufus B. von Klein Smid has announced.

The awards of \$285 each will go to pupils in the highest tenth of their class in scholarship from schools having more than 200 enrollment. Twenty-five awards will be granted to high school graduates and 10 to junior college applicants for the freshman year.

Applicants are required to file their nominations by April 15, with scholarships to be awarded on or before June 1. Only one candidate may be recommended from each school.

Youth and Labor Symposium

Both sides of the labor problem as it affects American youth is presented in a symposium featured in the March issue of *Occupations*, the vocational guidance magazine. Contributors are President William Green of the A. F. of L., President John L. Lewis of the

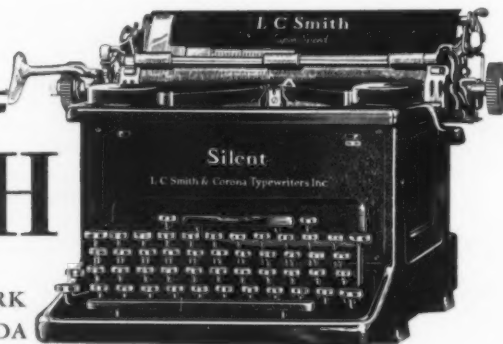
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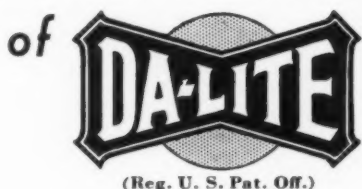
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There Are 28 Standard Sizes



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Spring-Operated or Electrically Controlled

Sizes up to 6' x 8' are spring-operated. Screens 6' x 8' and larger may be either spring-operated or electrically controlled. The former, known as Model C, are furnished with or without covers. The latter, known as the Electrol, can be lowered, raised or stopped at any position by a remote control, placed anywhere in the room.

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In this elementary-school classroom a careful study was made of the amount of light on each pupil's desk during the bright and the dark hours of a day. As a result of the study



. the room was "light-conditioned," and a \$34 investment (plus installation cost) was made in a General Electric light-control unit to turn the classroom lights on or off automatically as daylight dims or brightens. Now these pupils



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General Electric, Dept. 6A-201
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Please send me more information about G-E automatic light control (Bulletin GEA-2679).

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GENERAL  ELECTRIC

C.I.O., Leo Wolman of Columbia University, President George B. Cutten of Colgate University and John J. Collins of Fordham University.

Run Into Oklahoma

A new feature in county school activities will be presented at Purcell, McClain County, Okla., this month. Rural schools of the county will present a historical pageant celebrating the golden anniversary of the run of 1889 into old Oklahoma. It will be an open-air dramatization of many historical events in the development of the state.

Classroom Radio Handbook

In the course of a six weeks' radio education seminar held in connection with the Progressive Education Association's Eastern Workshop at Sarah Lawrence College, Bronxville, N. Y., during the summer of 1938, a committee of teachers, all of whom were experienced in classroom use of radio programs, began preparing a booklet that might stimulate wider use of radio by teachers and that would at the same time lay the foundations for more intelligent classroom radio utilization.

This booklet, "How to Use Radio in the Classroom," has just been published by the National Association of Broadcasters.

The materials for this introductory handbook on the use of radio were gathered under the general supervision of Norman Woelfel of the Evaluation of School Broadcasts, Ohio State University, a research study sponsored by the federal radio education committee of the Federal Communications Commission.

RESEARCH

To Further Teacher Training

To speed up improvements in teacher training throughout the nation, a clearing house of information regarding successful practices and promising experiments in teacher education will be established by the American Council on Education, Dr. Karl W. Bigelow, director of the council's commission on teacher education, has announced.

All aspects of programs of teacher education will be studied, and attention will be given to continued education of teachers while on the job.

Fifteen colleges and fifteen school systems will be asked to work with the commission and to experiment, collect and report evidence.

The project is financed by a special subsidy of \$320,000 from the General Education Board.

TRANSPORTATION

Six Point Bus Program

A six point program to improve bus transportation in Greene County, Ohio, has been submitted to city superintendents by H. C. Aultman, county superintendent. The recommendations are: (1) maintenance of the same high moral standards for bus drivers as are required for the teaching staff; (2) attendance of bus drivers at group discussions on transportation; (3) adoption of a time schedule for each route; (4) knowledge of the fundamentals of first aid; (5) maintenance of cordial relationships between school officials and local trustees and others involved in transportation safety, and (6) organization of a county association of bus drivers.

FINANCE

Proposes Experimental School

A proposal that the New York City board of education allocate between \$25,000 and \$50,000 to establish experimental nursery schools has been made by the Public Education Association. It was conceded that lack of money

The Foundation for Lasting Satisfaction



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would prevent the organization of nursery schools on a city-wide basis for some time but that introduction of the schools in strategic centers might be possible. It was further proposed that the board of higher education establish nursery schools as a part of the teacher training program in the city colleges. These schools could be used for parental education and consultation, child guidance, homemaking and other education courses, it was suggested.

Bond Refunding Saves Interest

A refunding program of building bonds has just been completed by the Oregon State Board of Higher Education that will save more than \$100,000 of interest over the life period of the bond issues, according to Frederick M. Hunter, chancellor of the Oregon State System of Higher Education. These building bonds have been issued from time to time to finance the construction of classroom buildings, health service buildings, gymnasiums and dormitories for the six institutions of higher learning in Oregon.

960 Undergraduates Aided

Nearly 60 per cent of the total enrollment at the University of New Hampshire at Durham was given financial aid through scholarships, employ-

ment and loans during the college year 1937-38. Nine hundred and sixty undergraduates at the school were aided. Greatest aid came through the channel of student loans, with some 446 undergraduates receiving \$54,709.80 from university and private loan funds. University and N.Y.A. employment made available more than \$63,230 to students.

Woburn Schools Reopen

A ruling that the city of Woburn, Mass., might spend up to a quarter of its expected school appropriation in the first three months of the year, anticipating adoption of the city budget this month, reopened the city's schools for the second time this school year.

Schools were closed only a part of one week during January when the school committee announced that it had exhausted all funds available until adoption of the city budget. Pending passage of the budget and appropriation of the year's fund, state law limits expenditures in any month to the average monthly expenditure in the last three months of the preceding year.

Seeking a Remedy

To avoid the recurrence of a period of closed schools in Dayton, Ohio, local citizens have organized the Montgomery County Public Advisory Commit-

tee, which will endeavor to cooperate with city and school officials in solving the financial difficulties.

N.Y.C. Adopts Record Budget

The New York City board of education has adopted a record school budget of \$160,286,488 for the fiscal year 1939-40, an increase of \$7,781,024 over that of last year. The budget has been sent to Mayor La Guardia for approval and it will then go to the board of estimate for official approval.

The board of education adopted the budget recommended by its finance committee, adding only 15 more teachers at an estimated cost of \$25,000. At a previous open hearing, many groups stressed the need for more instructors to teach physically handicapped children. As finally approved, the school system will have 214 of these teachers.

LEGISLATION

Refuses Nursery School Bill

The New York State senate has refused to advance to the order of final reading the Todd-Page Bill, granting local boards of education permission to establish and maintain free nursery schools for children between the ages of 2 and 4 years. The measure, which

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had passed the assembly, was opposed on the ground that its passage would eventually mean an increase in state aid to education. Opponents argued that no additional expenditures should be voted at this time in view of the widespread opposition to the \$411,000,000 state budget, an all-time high.

Become Colleges of Education

A bill just passed by the Oregon legislature and signed by the governor authorizes the change in name for the three Oregon normal schools to colleges of education. The Oregon Normal School becomes the Oregon College of Education; the Eastern Oregon Normal School, the Eastern Oregon College of Education, and the Southern Oregon Normal School, the Southern Oregon College of Education.

These three elementary teacher training centers were originally two year institutions, but with the raising of certification requirements they will become three year institutions by 1941.

NAMES IN NEWS

Superintendents

RACHAEL O. YAW, assistant superintendent of schools, East Cleveland, Ohio, since 1929, has been appointed

acting superintendent, succeeding the late WILLIAM H. KIRK.

H. L. SMITH, superintendent of schools at Paducah, Ky., since 1933, has been reelected to that position for a four year term beginning July 1.

MINNIE OBERMEIER and A. EUGENIE CHINNOCK, principals of New York City junior high schools, have been appointed assistant superintendents in the city school system. Three other principals who were made assistant superintendents at the same time are: RUFUS M. HARTILL, C. FREDERICK PERTSCH and THOMAS H. HUGHES.

D. D. KARROW has been appointed superintendent at Lake City, Minn., to succeed W. A. ANDREWS, resigned.

M. R. SIMPSON, principal of Blum High School, Wapakoneta, Ohio, for the last three years, has been elected to succeed M. R. MENSCHER as superintendent of Wapakoneta schools.

PAUL M. WINGER was appointed superintendent and J. C. PERRY was appointed principal of the high school at Sturgis, Mich., recently. Mr. Winger had served as the high school principal for five years.

M. F. STARK has been reelected superintendent of schools at Hiawatha, Kan., for the fifth year.

DR. EDWARD H. FULLER, superintendent of schools at Darien, Conn.,

was elected president of the Connecticut State School Superintendents' Association recently, succeeding DR. EARLE RUSSELL, superintendent at Windsor, Conn. Other officers elected were: DR. LLOYD H. BRIGHAM, West Hartford, vice president, and L. H. MCCUSICK, Winsted, secretary-treasurer.

VERNON F. PERRIGO, principal of Sherburn Senior High School, Sherburn, Minn., has been made superintendent of schools at Pemberton, Minn. RUDOLPH EHNBOOM is the new principal at Sherburn.

PAUL M. VINCENT, superintendent, Stevens Point, N. C., has been given a three year contract by the Stevens Point board of education.

C. E. ST. JOHN, superintendent of schools, Arkansas City, Kan., was reelected for another two year term by the board of education recently. He has served more than twenty years in the position.

RAY STEGAL, superintendent, Pontotoc County, Oklahoma, carries a power plant along with him in the back of his car when he visits the county schools. Mr. Stegal has installed the latest type of sound motion picture equipment for use in the schools and shows both entertainment and educational films.

H. L. GILLESPIE has been elected su-



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perintendent of schools at Holly Springs, Miss., for the coming year.

FRANK W. ALLENSON has been elected superintendent of schools at Humble, Tex., for the next two years.

K. W. MCFARLAND was reelected superintendent of schools at Coffeyville, Kan., for another two years.

G. W. HOLLINGSWORTH has been reelected superintendent of schools, Rotan, Tex., for a two year term.

Principals

CHARLES E. LEAVITT, assistant principal of Grosse Pointe High School, Grosse Pointe, Mich., has been appointed principal of the new John D. Pierce Junior High School in the same town. CHARLES SALTZER of the Grosse Pointe High School faculty succeeds Mr. Leavitt.

A. K. WILSON, who has been associated with the Monrovia-Arcadia-Duarte High School at Monrovia, Calif., for twenty-two years as teacher and in recent years as vice principal, has been named principal of the high school to succeed J. WARREN AYER. He will take over his duties July 1.

MRS. RUTH KEARBY, principal of Lincoln School, Paterson, N. J., has been transferred to the principalship of the Warren Point School, Warren Point, N. J. RONALD GLASS was appointed to

succeed Mrs. Kearby at the Lincoln School.

J. BRUCE BUCKLER has been reappointed principal of the Casey Township High School at Casey, Ill.

DAN R. KOVAR, principal of the Benjamin Franklin Junior High School, Uniontown, Pa., was awarded the Ph.D. degree by the University of Pittsburgh in February. The subject of Doctor Kovar's dissertation was "Student Attitudes Toward the Program of Social Recreation in Certain High Schools in Western Pennsylvania."

DAVID BRIGHTBILL, high school teacher, has been appointed vice principal of the Gloucester City High School, Gloucester, N. J.

VIRGIL E. MILLER, superintendent of the Trimble Township rural schools, Athens County, Ohio, has returned to his home city of Zanesville, Ohio, as assistant principal of Hancock Junior High School.

J. WRAY HENRY, principal of Circleville High School at Circleville, Ohio, was elected chairman of an organization of high school principals of four central Ohio counties perfected recently. The four county organization is a N.E.A. project for the purpose of developing discussion groups on high school administration, assembly pro-

grams, vocational guidance, curriculum changes, graduation exercises and various other activities.

J. W. TIDLER, principal of the Stafford High School, Stafford, Va., has been named principal of the high school at Luray, Va., next year.

J. LELAND ANDERSON, supervising principal, Frewsburg, N. Y., will terminate his services with that school system at the end of this school year to become supervising principal at Franklinville, N. Y.

FLOYD V. BARRETT was reelected for the fourth term as principal of the union high school district at Halsey, Ore., recently. Under Mr. Barrett's leadership the high school has met the requirements of the Northwest Association of Higher and Secondary Schools and was recently selected by the state department of public instruction as one of 12 schools in the state for study and evaluation.

H. CLAY FISK, principal of John Burroughs Elementary School, Tulsa, Okla., will be named principal of Daniel Webster High School, Tulsa, effective next September. D. M. ROBERTS, present principal at Daniel Webster, will be moved to another executive position in the Tulsa system.

W. G. ROBINSON has been elected principal of the McNairy County Cen-

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tral High School, Selmer, Tenn., for a three year period.

VICTOR R. BENNETT is the new principal of the George Washington Elementary School, White Plains, N. Y.

DWIGHT O. CONNER, assistant principal of the high school, Parkersburg, W. Va., recently was promoted to the principalship of the Parkersburg High School.

CHARLES FRIER, who has been assistant principal of the New Lebanon School, Hudson, N. Y., for the last two years, has been appointed principal for the remainder of the term to succeed the late FREDERICK ST. CLAIR DANFORTH.

In the Colleges

DR. P. ROY BRAMMELL, associate professor of education at Connecticut State College, Storrs, Conn., has been appointed to succeed PROF. CHARLES B. GENTRY as dean of the division of teacher training. Professor Gentry will continue as director of resident instruction and as director of the summer session.

DR. DONALD A. LAIRD, for many years head of the department of psychology at Colgate University, has been appointed head of a new foundation for consumer analysis established by N. W. Ayer & Son, advertising agency.

DR. JOHN A. MCGEOCH, chairman of the department of psychology at Wesleyan University, has been appointed head of the department of psychology at the University of Iowa. He succeeds DEAN CARL E. SEASHORE, who resigned as head of the department when he was appointed research professor of psychology in 1936.

DR. EDGAR G. GAMMON of Charlotte, N. C., has accepted the presidency of Hampden-Sydney College, Hampden-Sydney, Va. He will succeed DR. JOSEPH D. EGGLESTON on June 1.

Headmasters

JOHN F. SCHERESCHEWSKY, present senior master of the junior school at Suffield Academy, Suffield, Conn., will take office July 1 as headmaster of the academy.

JOHN REED, teacher and submaster at Concord Senior High School, Concord, N. H., since 1928, has been elected headmaster of the high school to succeed HAROLD N. CHAMBERLAIN, whose resignation becomes effective July 1. JOHN ELLIS BOURNE, Latin instructor, was named submaster.

Retirements and Resignations

DR. ENDICOTT PEABODY, founder of Groton School at Groton, Mass., and its headmaster for fifty-four years, has

announced his resignation, to take effect in June 1940. Doctor Peabody is 81 years of age. PRESIDENT FRANKLIN D. ROOSEVELT and his sons, and the sons and grandsons of the late former president THEODORE ROOSEVELT, have been among the more than 1400 youths receiving diplomas from Doctor Peabody's preparatory school.

DR. DAVID H. SUMSTEIN terminated his forty-eight year career as an educator on March 1 when he retired as director of the department of curriculum study and research of the Pittsburgh public schools.

DR. WILLIAM H. GEORGE, dean of the college of arts and sciences at the University of Hawaii, will retire at the end of August after 32 years of teaching. Doctor George will be succeeded by DR. THAYNE M. LIVESAY, professor of psychology and director of admission and director of summer sessions.

ARTHUR E. DECKER will retire as superintendent of schools, Hancock County, Illinois, at the end of the school year.

ADRIAN HOLMES ONDERDONK will retire at the end of the school year as headmaster of St. James School, Hagerstown, Md., a position he has held for thirty-six years. J. BENJAMIN DRAKE of the faculty will be Mr. Onderdonk's successor.

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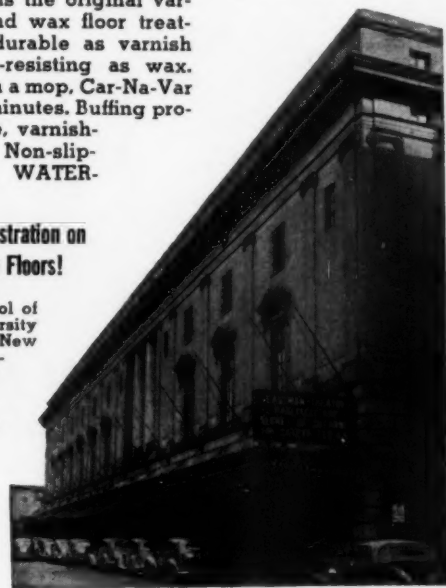
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I. J. MONTGOMERY, superintendent of schools at Blair, Neb., since 1932, will not be a candidate for the post next year. Mr. Montgomery notified the board of education that during the summer he will teach educational psychology at the University of Nebraska and next fall he will go to the University of Washington to study for a doctor of philosophy degree.

DR. J. HERBERT KELLEY retired February 28 as executive secretary of the Pennsylvania State Education Association. HARVEY ELLISON GAYMAN was elected as his successor. The new secretary has been the association's director of research and its assistant executive secretary.

O. L. DAVIS has resigned as superintendent of schools at San Benito, Tex.

ROBERT E. SEYMOUR has resigned as principal of Blake School, Greenwood, S. C., and has been succeeded by FRANK HOLROYD for the remainder of the school term.

Miscellaneous

FRANK W. JACKSON, superintendent of schools for the Madison supervisory union, Madison, N. H., is rapidly recovering at his home at Madison from a heart attack. Mr. Jackson has served nearly twenty-eight years as superintendent of schools in New Hampshire.

COL. WALTER C. COLE of Highland Park, Mich., is the winner of the first Academic Freedom Award, a medal to be presented annually by the Department of Classroom Teachers of the N.E.A. to the layman who has contributed the most to the cause of educational freedom during the year. Colonel Cole was chairman of the Citizens' Emergency Committee of Highland Park which worked to obtain reinstatement of 42 teachers of the city after their wholesale dismissal.

H. E. HENDRIX, Arizona state superintendent, has been elected chairman of the executive committee of the National Council of Chief State School Officers. M. D. COLLINS, Georgia, was chosen vice chairman. Members of the executive committee are: MRS. INEZ JOHNSON LEWIS, Colorado, secretary; COLIN ENGLISH, Florida; SIDNEY B. HALL, Virginia; BERTRAM E. PACKARD, Maine; WALTER F. DEXTER, California; FLOYD I. McMURRAY, Indiana, and L. A. WOODS, Texas.

BRUCE A. FINDLAY, former assistant superintendent in the Los Angeles school system, has been appointed director in charge of visual education for the city's schools. He will direct the compilation and disbursement of all visual education equipment used to supplement textbook instruction.

Deaths

DR. RAYMOND A. PEARSON, 65, former president of the University of Maryland and of Iowa State College, died of heart attack at his home at Hyattsville, Md., recently.

OTIS EMMETT BELL, principal of the junior high school, Idaho Falls, Idaho, died recently.

DEAN WILLIAM D. TRAUTMAN of Adelbert College, Western Reserve University, died in Cleveland.

DR. EDWARD NEWTON JONES, former principal of Plattsburg State Normal School, Plattsburg, N. Y., died recently at his home at White Plains. He was 86 years of age.

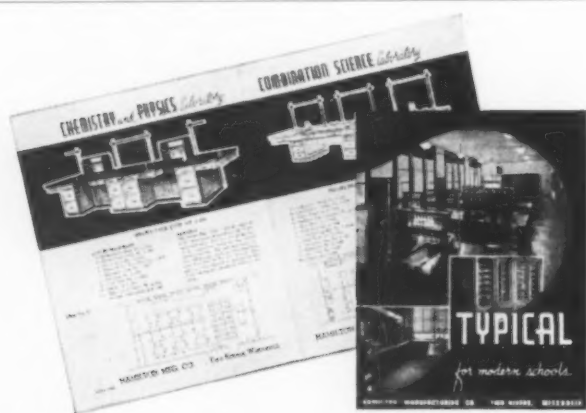
CHARLES C. MADEIRA, superintendent of schools, Sunbury, Pa., died following a month's illness.

BESSIE M. GALLAGHER, principal of Winfield Scott School, Elizabeth, N. J., for thirteen years, died recently.

S. BROOKS MARSHALL, 53, superintendent of schools, Belton, S. C., died of pneumonia following a very short illness.

JOHN E. GILDEA, 61, superintendent at Coaldale, Pa., for thirty-five years, died following a heart attack.

ADMIRAL RALPH EARLE, president of Worcester Polytechnic Institute, Worcester, Mass., died unexpectedly following a cerebral hemorrhage.



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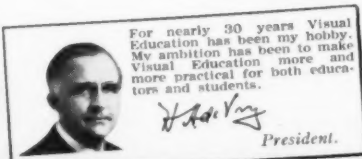
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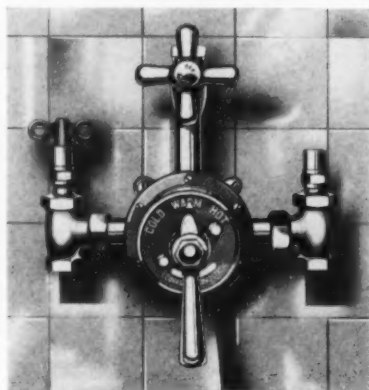
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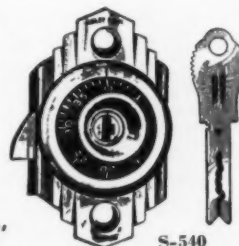
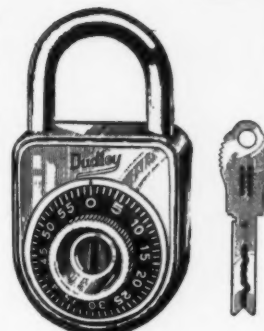
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PREPARATION OF SCHOOL PERSONNEL. By Charles H. Judd. *Publication of the Regents' Inquiry.* New York: McGraw-Hill Book Co., Inc., 1938. Pp. xi+151. \$1.50.

Declares that the improvement of facilities for the training of public school teachers is one of the fundamental problems in New York State. Takes strong stand against the introduction of professional courses in the first two years and believes that a minimum of four years' preparation is necessary.

YOUR COMMUNITY. *Its Provision for Health, Education, Safety and Welfare.* By Joanna C. Colcord. New York: Russell Sage Foundation, 1939. Pp. 249. \$0.85.

Outline for sociologic community survey that should be extremely valuable to school administrators in furnishing a technic for basic district survey.

INDIAN CAVALCADE. By Clark Wissler. *Illustrated.* New York: Sheridan House, 1938. Pp. 351. \$3.

An able anthropologist sets forth in most readable and simple style the

story of the American Indian, growing out of a lifetime of study and observation. Valuable for secondary school libraries.

VOCATIONAL EDUCATION. By John Dale Russell and Associates. *Staff Study No. 8. Prepared for the Advisory Committee on Education.* Washington, D. C.: Government Printing Office, 1938. Pp. x+325. \$0.40 (Paper Cover).

"On the basis of the study now published and information received directly through other inquiries, the committee reached the definite conclusion that many of the provisions of the Smith-Hughes Act are unnecessarily restrictive and in some cases obsolete. . . . So far as possible, control over the program should be decentralized to the states."

ACTIVITIES IN THE ELEMENTARY SCHOOL. By Harry C. McKown. *McGraw-Hill Series in Education.* New York: McGraw-Hill Book Co., Inc., 1938. Pp. xx+473. \$3.

Emphasis on purposes, methods and means for organizing and administer-

ing "activities" in the elementary school. Many practical suggestions.

HOW TO MAKE A COMMUNITY YOUTH SURVEY. By M. M. Chambers and Howard M. Bell. Washington, D. C.: The American Council on Education, 1938. Pp. v+45. \$0.25 (Paper Cover).


Brief but practical technic that will be useful to any community desiring to find out more about youth conditions.

TYPE OF SCHOOL DISTRICT AS A FACTOR IN HIGH SCHOOL ATTENDANCE IN IOWA. By R. C. Williams. *Research Bulletin No. 23. Published by State of Iowa, Des Moines, Iowa,* 1938. Pp. 86. (Paper Cover.)

Iowa discovers the importance of sound administrative structure as a means of increasing the availability of secondary schools for all of the children.

THE INFLUENCE OF THE PUBLIC WORKS ADMINISTRATION ON SCHOOL BUILDING CONSTRUCTION IN NEW YORK STATE, 1933-1936. By Dr. Howard T. Herber. *Contributions to Education, No. 762.* New York City: Bureau of Publications, Teachers College, Columbia University, 1938. Pp. vii+107. \$1.60.

Survey of the effects of P.W.A. upon the erection of school buildings indi-



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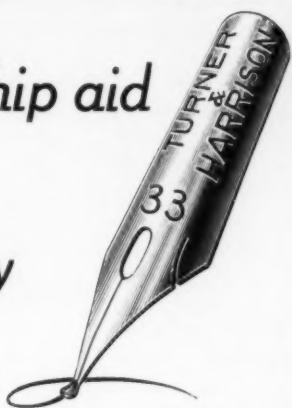
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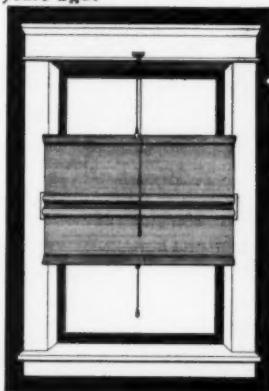


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TRUE CONFESSIONS OF A PH.D. By Carroll Atkinson. Edinboro, Pa.: Edinboro Educational Press, 1939. Pp. 89. \$0.50.

One who has labored long and hard for the highest academic label feels constrained to tell others all about the strain and worry. A mild critique!

AMERICA BEGINS AGAIN. The Conquest of Waste in Our Natural Resources. By Katherine Glover. New York: McGraw-Hill Book Company, Inc., 1939. Pp. xv+382. \$1.76.

Sensible presentation of the case for intelligent conservation of our resource heritage. Recommended as collateral secondary school reading.

PUBLIC EDUCATION IN THE DISTRICT OF COLUMBIA. By Lloyd E. Blauch and J. Orin Powers. Staff Study No. 15. Prepared for Advisory Committee on Education. Washington, D. C.: U. S. Gov't Printing Office, 1938. Pp. x+99. \$0.20 (Paper Cover).

Unbiased report of public education under the direct control of congress. The tendency of congress "to legislate upon many matters that should have been reserved for regulation by the

board of education of the district" is judiciously criticized. A good picture of federal educational control.

EDUCATION FOR CITIZENSHIP. By Howard E. Wilson. Publication of Regents' Inquiry. New York: McGraw-Hill Book Co., Inc., 1938. Pp. xii+272. \$2.75.

In New York State in the social studies "the objectives of giving pupils systematic training in study skills and in desirable mental operations and of developing the emotional drives which alone make the possession of information and insight socially worth while are sadly neglected."

HIGH SCHOOL AND LIFE. Publication of Regents' Inquiry. New York City: McGraw-Hill Book Company, Inc., 1938. Pp. xii+377. \$3.

The weaknesses of secondary education in New York State are presented in condensed form, together with specific recommendations for improvement of existing deficiencies. A reasonable treatment.

THE SELECTION AND EDUCATION OF OKLAHOMA HIGH SCHOOL TEACHERS. By Ernest E. Brown. Oklahoma City, Okla.: Harlow Publishing Company, 1938. Pp. xiii+210.

Study of selection and preparation of high school teachers in Oklahoma indicates deficiency in practice teaching.

THE IMPROVEMENT OF TEACHING IN SECONDARY SCHOOLS. By Frank A. Butler. Chicago: University of Chicago Press, 1939. Pp. x+389. \$3.

Text for the improvement of secondary teachers developed in terms of eight basic principles.

SOCIAL PROCESSES. An Experiment in Educating College Students for Social Living. By Margaret O. Koopman. Mount Pleasant, Mich.: Central State Teachers College, 1939. Pp. 259. \$1 (Paper Cover).

Description of an experiment in training college students for social living. Interesting procedures.

BABIES WITHOUT TAILS. Stories by Walter Duranty. New York: Modern Age Books, Inc., 1937. Pp. 168.

Fascinating collection of short stories of modern Russia.

A STUDY OF THE POSSIBILITIES OF GRAPHS AS A MEANS OF INSTRUCTION IN THE FIRST FOUR GRADES OF THE ELEMENTARY SCHOOL. By Ruth G. Strickland. Contributions to Education, No. 745. New York City: Bureau of Publications, Teachers College, Columbia University, 1938. Pp. 172. \$1.85.

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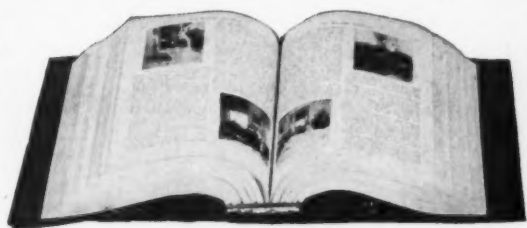
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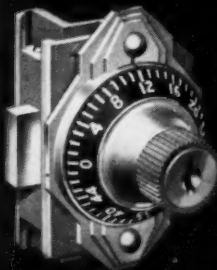
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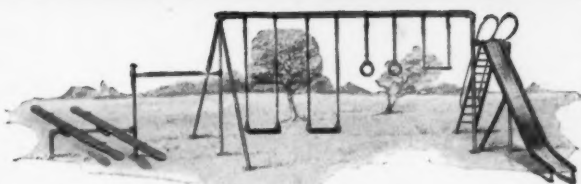
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REHEARSAL FOR SAFETY. By Fanny Venable Cannon. New York: E. P. Dutton & Company, Inc., 1939. Pp. 131. \$1.

A book of simple safety plays for use in the grades, growing out of experience in New York City.

COLLEGE BUSINESS. By T. B. Woodmore. Nashville, Tenn.: The Parthenon Press, 1938. Pp. 104. \$2.

Brief outline of simple plan for college financial accounting.

PARTICIPATION OF SCHOOL PERSONNEL IN ADMINISTRATION. *A Study of Conditions Which Make for Effective Participation and Philosophy Underlying Theory and Practice of This Type of Administration.* By Oliver H. Bimson. Lincoln, Neb., 1939. Pp. xi+117.

Positive recommendations in favor of more democratic administration of educational personnel through recognition and particularly direct participation in the process.

MEIN KAMPF. By Adolf Hitler. Complete and Unabridged. Fully Annotated. New York: Reynal & Hitchcock, 1939. Pp. xxxvi+993. \$3.

Translated completely for the first time, this carefully annotated American edition of a significant book furnishes first-hand opportunity to study the nature and character of the Nazi

leader and to determine the basis for possible adjustment between this dynamic Nazi ideology and democracy.

MENTAL TESTS: *Their History, Principles and Applications.* By Frank N. Freeman. Boston: Houghton Mifflin Company, 1931. Pp. x+460. \$2.50.

The earlier work by this author has been extensively revised and brought up to date for the benefit of teachers in training. A soundly conservative treatment.

Just Off the Press

A GUIDE TO THE LITERARY READING OF COLLEGE FRESHMEN. By R. P. Cuff. Boston: Chapman & Grimes, 1938. Pp. 63. \$0.50 (Paper Cover).

CAUSES OF RETARDATION IN READING AND METHODS OF ELIMINATING THEM. Prepared by Gertrude Whipple. Publication No. 274. Detroit, Mich.: Board of Education, 1939. Pp. 31. \$0.15.

THE THIRTY-EIGHTH YEARBOOK of the National Society for the Study of Education. PART I: CHILD DEVELOPMENT AND THE CURRICULUM. Pp. x+442. PART II: GENERAL EDUCATION IN THE AMERICAN COLLEGE. Pp. xii+382. Edited by Guy Montrose Whipple. Bloomington, Ill.: Public School Publishing Company, 1939.

SAFETY AND SAFETY EDUCATION. *An Annotated Bibliography. Prepared by the Safety Education Projects of the Research Division.* Washington, D. C.: National Education Association, 1939. Pp. 64. \$0.25.

THE SPIRIT OF HORACE MANN CARRIES ON. By Ernest H. Koch Jr. Boston: Meador Publishing Company, 1939. Pp. 168. \$1.50.

THE BARNES DOLLAR SPORTS LIBRARY, Including FOOTBALL by W. Glenn Killinger, BASEBALL by Daniel E. Jessee, BASKET BALL by Charles C. Murphy, TRACK AND FIELD by Ray Conger, FUNDAMENTAL HANDBALL by Bernath E. Phillips and MODERN METHODS IN ARCHERY by Natalie Reichart and Gilman Keasy. New York: A. S. Barnes and Company, 1939. \$1 Each.

SCHOOLS IN SMALL COMMUNITIES. *Seventeenth Yearbook, American Association of School Administrators.* Washington, D. C.: National Education Association, 1939. Pp. 608. \$2.

OLAF AND ANE: *Children of the Northland.* By Virginia Olcott. With Illustrations by Constance Whittemore. New York: Silver Burdett Company, 1938. Pp. vii+168. \$0.96.

INTRODUCING THE PAST. By Rachel Reed. Boston: Little, Brown and Company, 1939. Pp. 651. \$1.68.



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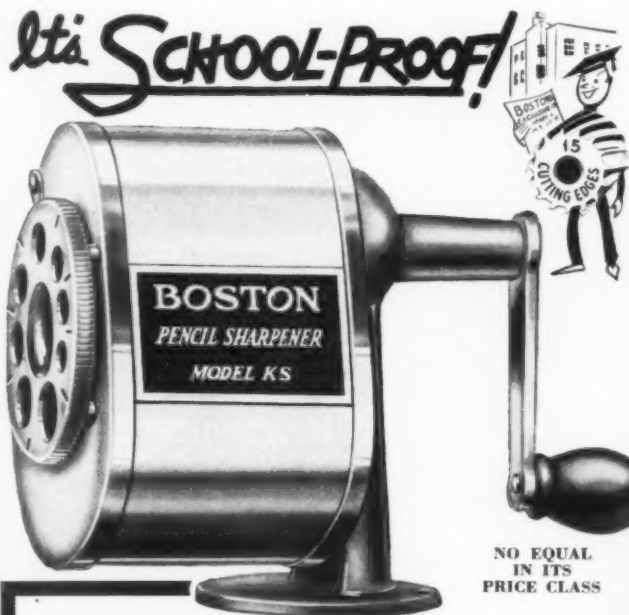
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THE PROFESSIONAL STATUS OF TEACHERS. *Bulletin 150. Harrisburg, Pa.: Department of Public Instruction, 1939. Lester K. Ade, Superintendent. Pp. 99. (Paper Cover.)*

VERBAL INFLUENCES ON CHILDREN'S BEHAVIOR. By Marguerite Wilker Johnson. *Ann Arbor, Mich.: University of Michigan Press, 1939. Pp. ix+191. (Paper Cover.)*

GROWING IN CITIZENSHIP. By Jeremiah S. Young and Edwin M. Barton. *New York: McGraw-Hill Book Company, Inc., 1939. Pp. xx+822+LII. \$1.76.*

PROBLEMS IN PUBLIC SCHOOL SUPERVISION. By Alonzo F. Myers and Louise M. Kifer. *New York: Prentice-Hall, Inc., 1939. Pp. xii+211. \$2.*

HOUSING. *An Integrating Course of Study Based Upon the Lincoln Gardens Federal Housing Project, Evansville, Indiana.* By William E. Best and others. *Evansville, Ind.: Lincoln High School, 1938. Pp. 52. (Mimeographed, Paper Cover.)*

Origin of Summer Camps

Porter Sargent writes that in the article "Camps of Fifty Years Ago" by Herbert Twining in the April 1938 issue of *The Nation's Schools*, most

of the historical matter is largely copyrighted material taken from annual editions of the "Handbook of Private Schools" from the 1915 edition on, and annual editions of the "Handbook of Summer Camps" from 1924 to 1935.

Mr. Twining claims that his material was taken from Mr. H. W. Gibson's article in the February 1936 issue of *Camping* magazine. But Mr. Gibson had the use of Mr. Sargent's files in writing this and permission with acknowledgment to use his copyrighted material. There was no other source from which Mr. Twining could have obtained this material except a few magazine articles listed and annotated in Mr. Sargent's published bibliography, one of which Mr. Twining refers to in a footnote and which was cited in Sargent's "Handbook" as early as 1915.

The origin of the development of the summer camp has been a matter of research and writing of Mr. Sargent's for more than twenty years. In the 1935 edition of his "Handbook of Summer Camps," he wrote: "It is surprising that up to 1915 the pioneers in the camp movement and the men familiar with the locality had not even heard of Ernest Berkeley Balch and his Camp Chocorua. The origin of the summer camp had already been lost

in obscurity when, twenty years ago, I began to inquire into it. There were a number of camp directors who had started their camps without knowledge of any preceding camps and thought theirs were first.

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"When the Mexican revolution spread to Yucatan and Balch returned to New York a refugee, I eventually got in touch with him. . . . He was surprised to learn of the magnitude of the camp movement but gradually recalled in conversation and letters the story of his first camp, and we both came to realize that it was out of his initiative and his plans that the summer camp had so largely developed.

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The newest addition to the Autosan dishwashing division of Colt's Patent Fire Arms Mfg. Company, Hartford, Conn., is designed to give big machine efficiency in the average size kitchen where time and space are important. . . . Although lighter in weight than the machine built for professional trade, the new floor sander of Porter-Cable Machine Co., Syracuse, N. Y., has all the qualities of the heavier machines built into it. . . . McDonnell & Miller, 400 North Michigan, Chicago, has made available a complete catalog on McDonnell controls for installation on

steam boilers to help guard against the costly dangers of low water.

High pressure safety is one of the functions of the new combustion regulator designed by Minneapolis-Honeywell Regulator Company, Minneapolis, for use with a gas fired boiler. . . . In order to promote greater efficiency, economy and satisfaction in washrooms, Scott Paper Company, Chester, Pa., has just published an attractive booklet, "Scott Washroom Advisory Service." . . . Announcement has just been made of a new kind of portable electric blower by Skilsaw, Inc., Chicago; it combines the utility of both a high speed and a low speed blower in one all-purpose tool.

Broad, free strokes on both blackboard and paper are encouraged by the smoothness of the new Alphacolor chalk crayons recently perfected by the Weber-Costello Company, Chicago Heights, Ill. . . .

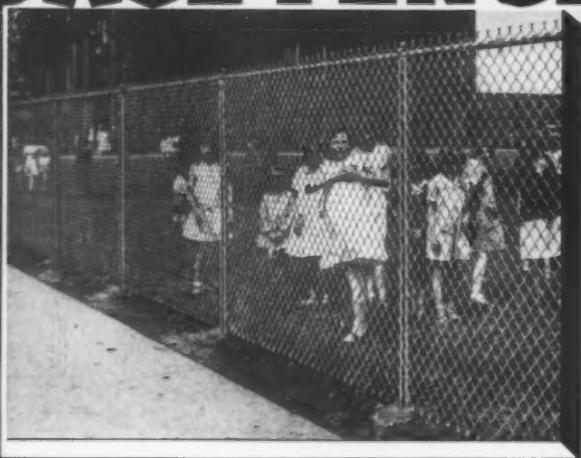
A catalog of athletic devices and playground equipment has been issued by J. E. Burke Company, Fond du Lac, Wis. . . . Basketball backstops are featured in the handsome 18 page booklet published by the Everwear Manufacturing Company, Springfield, Ohio. Official rules for laying out a basket-

ball court are also given. . . . Another playground equipment house, the Trojan Playground Equipment Mfg. Company, St. Cloud, Minn., has recently published a new catalog. . . . A slide, 11 feet high and nearly 30 feet in length, built in the shape of an elephant, has been constructed for the New York World's Fair by J. E. Porter Corporation, Ottawa, Ill.

Appointment of Paul C. Richardson as head of a newly formed educational sales division of the RCA Manufacturing Company, Camden, N. J., has been announced. The duties of Ellsworth C. Dent, educational director, will remain unchanged. . . . H. Channon Company, North Wacker Drive, Chicago, has established a school technical service department to be devoted exclusively to assisting school shop instructors and supervisors with their equipment and tool problems. F. B. Tannehill will be in charge of the department.

Commemorating three decades of service as producers of industrial cleaning methods and materials, Oakite Products, Inc., 22 Thames Street, New York, has published a special issue of its house organ which gives a historical review of the development of specialized cleaning methods and materials.

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THE fact that school cafeterias are advancing from their lowly locations among the basement steam pipes to handsomely designed roof gardens and penthouses (see pages 53 and 82) indicates that school feeding now rates large in the educational program as well as in school plant design. The NATION'S SCHOOLS has been a leader in this development owing to the proportion of editorial space allotted monthly to this department and to the activities as department editor of the foremost authority on the school cafeteria, Dr. Mary deGarmo Bryan of Teachers College, Columbia University.

Next month this section on school feeding will present "Figuring Food Costs Rapidly," an application of the familiar type of interest table to charts for the use of the cafeteria manager. Grace Stowell Saunders, supervisor of the department of cafeterias, Syracuse, N. Y., has worked out these tables. They will be of use to determine (a) prices that must be charged for individual items and (b) the amount of the fixed price that may be spent for food, labor and other expenses on the basis of established operating percentages.

SCHOOLMEN in the larger institutions often wonder what the smaller schools are doing to maintain a satisfactory curriculum in this day of great diversification. A southern Idaho superintendent, Verner Stoddard, will tell in the next issue how the teaching program has been worked out at Spencer, Ida., where the high school enrollment totals 20, even though three communities are served. It makes good reading. There are three teachers, the state minimum, and two men and one woman are the local rule. A unique feature is the Mother School plan,

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whereby pupils at Kilgore, 18 miles away, may stay at home two years longer by taking their freshman and sophomore work on an affiliate basis.

GREENVILLE, S. C., has a new high school plant, believed to represent a wise investment of the taxpayers' money; certainly it is a functional plant for Greenville's educational program. Ray L. Hamon of Peabody College will describe the building next month and there will be photographs and floor plans to accompany his copy.

ARE the woods too full of high school principals? C. W. Martin, professor of education at State Teachers College, Kirksville, Mo., contends that half of the so-called high school principals are not needed.

If it is true that half the high schools in the United States have 100 or fewer pupils, probably it is also true that half the high schools are not needed. They are too small to serve their pupils effectively.

As to the implication behind the "so-called," Doctor Martin declares that in small high schools the superintendent is actually the principal, there not being enough administrative and supervisory work to go around. He will suggest remedies for the situation in the next issue.

VISUAL EDUCATION is the subject of next month's Portfolio. So much valuable material is pouring in for it that the editors are both joyful and distressed. It's a big responsibility being so rich.

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LOOKING FORWARD

Aid for Buildings

ON FEBRUARY 28 Representative Joe Starnes of Alabama introduced into the Congress, House Joint Resolution 4576 providing for the creation of a permanent Public Works Administration authority through which it is planned to continue the work of the present Federal Emergency Administration of Public Works. This bill provides for a 1939-40 appropriation of \$500,000,000 for loans and grants for nonfederal public works, including both schools and hospitals. The grant is limited to 45 per cent of the cost of the total project. Provision is also made for special grants to public agencies, not exceeding 3 per cent of the total cost of the project for the preparation of plans and specifications. This grant would be in addition to the total cost and would provide greater flexibility in the making of surveys and preliminary studies. Under the present procedure all of the architectural and engineering fees must be included in the total appropriation.

When due consideration is given the facts that, in view of the depression, tax limitations have been placed upon real property and drains have been made upon local resources by increased state and federal taxes, it is obvious that if school plant needs are to receive the necessary consideration, some methods of financing outside of local funds must be provided. In fact, unless there is definite future provision for financing public education, through capital outlay other than from local sources, the outlook for school construction is not bright.

It is also significant to note that under the 1938 P.W.A. program, a total of 2808 educational projects was approved for a total in grants amounting to \$220,907,508. The total estimated cost of this program is \$469,195,114, or almost the normal amount of money required to meet current expansion and replacement needs. The importance of continuing federal subventions for buildings appears to be too obvious to require extended emphasis. From a practical standpoint it is well to bear in mind that the Starnes resolution has a strong possibility of being enacted if a sufficient supporting public opinion is developed.

Our best advice to boards of education and superintendents is to continue with their survey of building needs to be ready for possible grants under this pro-

posed program and to inform congressmen and senators of their attitude toward the bill. Enactment of this joint resolution into law means a continuation of present plans for more satisfactory public school housing. It does not entail federal control beyond the termination of the construction period.

Industry Must Help

THE National Industrial Conference Board and other agencies interested in technologic problems have taken pains to point out during the last three years the danger to our economic processes in the accruing shortage of skilled labor. So far as these data are valid, there appears to be a definite lack of trained men in certain divisions and in certain processes within these divisions. It is questionable whether this deficit in skilled workers is general in all fields and whether it exists in all sections of the country.

This condition is due primarily to the shortsighted policies of both management and labor in their depression defeatist attitudes. Instead of planning wisely for the future upon the assumption that the depression period would eventually terminate, both the manufacturer and organized labor acted emotionally and with narrow vision. They failed to take into consideration that an extended depression period would mean the aging and obsolescence of existing labor and that the postdepression period would require a large reservoir of mechanical skill. Instead, apprentice schools within manufacturing plants were almost completely shut down while labor unions unwisely restricted their own programs in the training of a new generation of skilled artisans and craftsmen.

Their lack of vision and the corresponding lack of sensible plans for the future were approached with the same degree of unreasoning subjectivity that characterized their attitude toward the public schools. Every economic organization during this depression period was keen for the quick reduction of educational expenditures, again without apparent realization that this country had a future as well as a past and that the transmission of knowledge, power and skills to the oncoming generation could not be avoided except with grave danger to ultimate recovery. The only

credit that can be given to business and labor leaders during this period is that they were thoroughly consistent. They shut down on their own apprentice training as well as attacked expenditures for public education.

A supply of skilled labor in each generation is essential to the economic welfare of this country. *Fortune*, recognizing this need, recently made a survey of public opinion as to how the difficulty should be overcome. According to the opinion registered, 41.9 per cent believed this training to be a responsibility of the public school system; 26.8 per cent felt that industry had a responsibility; 8.9 per cent considered it a responsibility of the labor unions, while the remainder, 22.4 per cent, did not know or scattered their opinions. The most surprising result was that 6.8 per cent felt that W.P.A. should do something about it!

Is the public school to be held responsible for the production of skilled craftsmen? Almost one-half of the returns indicated that the people sampled entertained such belief. In actual fact, it is extremely doubtful whether the public school can organize its program to carry on this work successfully. It seems to us that the responsibility for producing technologic skill is a cooperative venture in which the public school can assume only partial responsibility. The generally effective limits of vocational training in the schools will probably be confined to the teaching of an understanding of our economic system and the development of generalized skills through practice with generalized machines and craft activities. The furnishing of specific finished training and the production of the skilled journeyman or master craftsman or mechanic are definitely responsibilities of the factory and of organized labor. The foundation work furnished by the schools must be supplemented by organized apprentice training within the plant and within the union.

Industry moves too fast to permit the teaching of specific detailed skills, and organized labor would be extremely shortsighted if it gave up its control over apprentice training. Neither industry nor labor should be permitted to push its responsibility to the schools by declaring that an emergency exists and asking what the schools are going to do about it. The schools may rightfully say that within the limits of their badly cut depression budgets they have never stopped doing what they could. The present question is: What are industry and labor going to do about it?

State Action Needed

ONE of the resolutions adopted at Cleveland by the American Association of School Administrators pointed out the dangers in the development of a dual system of public education in this country, one operated by the states and the other by the federal government, growing out of the crystallization of

emergency practices. In our opinion, this resolution is so important for members of the teaching profession to consider that it is here reproduced in full:

Consistent with our historic principle of the control of education by the states, the American Association of School Administrators warns the American people that the development of two public school systems in this country, one controlled by Washington, the other controlled by the localities and the states, will not only result in needless duplication, waste and inefficiency but will be particularly dangerous at a time when authoritarianism and regimentation are gaining the upper hand in so many countries. This danger comes from the creation of various federal educational agencies which, it is true, perform indispensable services. Federal support for these agencies is essential, but federal control is neither necessary nor desirable. Since every state has a going school system, the administration of these services should be lodged in the states. Local and state control is one of the strongest supports of our civil liberties and of intellectual freedom.

Similarly, we warn against the growing tendency of federal departments and bureaus to establish educational activities which function without regard to the legally established federal Office of Education and frequently result in confusion and waste of public funds. The administration of all federal services to education should be lodged in the United States Office of Education.

There can be little difference of opinion with respect to the warning in the first part of this resolution. The tendency of the federal government to insist upon full control of every activity which it partially or completely supports has been apparent for a number of years. It is just as obvious that unless a strong public opinion to the contrary is developed, the so-called emergency educational activities will become permanent parts of a definitely evolving federal system of public education. While the educational program of the Works Progress Administration has been commendable in many respects, its original purpose was to tide over an emergency interval and to stimulate local districts to provide for certain emerging needs. The time has come when this program should be completely integrated with the state public school system and federal operation discontinued. The only activities over which the federal government may justifiably retain control are the Civilian Conservation Camps and the National Youth Administration.

However, the federal government is not completely at fault. A peculiar situation is arising with respect to federal educational emergency activities. The emergency personnel in a number of states is as busy devising means for the conservation and continuation of its jobs as might be expected from any well-organized interest group. A larger proportion of the teachers now employed by the federal government represents a mar-

ginal product. In addition, many are now beyond the age limit that the schools have set for employment. This fact creates a definite relief problem for the federal authority. Unless local school districts are willing to provide work for the 50,000 teachers now engaged in W.P.A. educational activities, there is little possibility for the termination of these dual and sometimes competing federal programs.

If each state would approach the federal government with a practical solution of this problem, federal withdrawal is still a possibility. If the states continue their policy of indifference for a few years more, there is little chance to escape a permanent federal educational agency within each state. The resolution needs more than lip service. It demands constructive action. The responsibility lies directly with the states. Nineteen hundred thirty-nine is a crucial year.

A President Reports

THE careful reading of the 1937-38 report of James Bryant Conant, president of Harvard University, is wholeheartedly recommended to the teaching profession. In it President Conant displays some of the power and acuity of vision that marked the late Doctor Eliot. At the turn of the century, Angell, Eliot and Harper formed a trio of university presidents who saw clearly some of the grave defects in the organization of public education.

Doctor Conant turns his attention to the importance of public education as a social process rather than merely as a preparation for university work. He does not neglect the essential training for advanced education; in fact, he points out the grave danger of too early specialization and compartmentation in education in terms of a deterministic philosophy. But he also points out, and not too gently, the obvious preoccupation of our universities with their own academic interests to the neglect of their possible contribution to the most vital area of social education:

"It is, perhaps, not an overstatement to say that, by and large, American universities have avoided a wholehearted or systematic attention to public education at the school level. Certainly there has rarely been, in any institution, a concerted attack by the faculties of arts and sciences and of education on the problems presented by the new conditions. Yet such an effort is imperatively needed. There can be no question that the study of education as a social process—quite apart from the training of teachers—is as important as the study of law or of business administration. Any university which wishes to do its share for the public welfare must have a strong faculty of education with the same degree of professional feeling as exists in other professional faculties."

His conclusions point toward the essential university concept and responsibility for this activity as opposed

to institutional compartmentation within a single discipline or a series of disciplines.

Doctor Conant's comments are timely and valid and indicate a degree of understanding too frequently absent from presidential consideration.

Marriage No Ban

THE results of a test case in Louisiana respecting the right of a woman teacher to marry without loss of position, reported by Doctor Chambers in this issue, should be heartening to the increasingly large number within and without the teaching profession who insist that the marriage of women teachers is highly desirable and a purely personal matter. In the tenure act of 1936, specific provision is made that "no permanent teacher shall be removed from office except upon written and signed charges of wilful neglect of duty, or of incompetency, or dishonesty, and then only if found guilty after a hearing by the school board of that parish. . . ."

A local school board refused to reengage a woman teacher who had married upon the ground that she violated a board rule which provided for automatic dismissal in case of marriage. The state superintendent informed the board that marriage was not a cause for dismissal but the board refused reinstatement. The teacher brought suit and was ordered reinstated by the court with full salary. Thus the Louisiana decision adds another state to the group in which marriage of women teachers is not considered as evidence of impertinence, insubordination, incompetence or neglect.

Story of the Year

LAST fall the board of superintendents recommended a new science course of study for the New York junior high schools. The teaching of sex was deliberately limited to teaching about the birds and the flowers, avoiding consideration of "mammalian reproduction." A member of the board of education, long interested in the need for teaching sex, felt it strange that New York adolescents should grow up with the idea that man was sexless. He asked the reason for the omission. The board of superintendents made ponderous reply and among the reasons was this gem contributed by a junior high school principal:

"The schools ought not to shoulder the responsibility of shortening for these little ones, very precious to us, their period of innocent childhood."

A supplementary report to the board of education showed that from the same junior high school "center of childish innocence" an average of two girls go each month to a home for unmarried mothers!

The Editor



Tenderness and poetic feeling are combined with excellent spatial design in Russel Speakman's "Children's Outdoor Life," a panel executed in oil on canvas.

Murals Enliven School

MARY MORSELL



Final panel of a series of three in the auditorium of Manley High School, Chicago, by Ralf Hendricksen tells of "Incidents in the Life of Horace Mann" with renewed significance.

THE murals that have been painted by artists of the W.P.A. Federal Art Project in schools throughout the country are, above all else, planned and executed as part of an architectural whole. Aside from this general insistence of harmony and fitness, the painters are free to choose from a wide range of subject matter in consultation with the agents of sponsoring institutions. Epic themes of the rise of civilization; the history of America; the ambitions and interests of various types of students; great movements and personalities in literature, music, science and exploration; agriculture, industry, in both regional and national interpretations; more decorative compositions of animals, flowers, landscape motives, and even abstractions



Exquisite color and rhythms combine with a spirited interpretation of animals in Anne Michalov's mural panel, oil on canvas, for Mary Todd School, Aurora, Ill.

Walls With Vivid Tales

Staff Member, Federal Art Project

—all these are to be found among the murals that now adorn the public schools of this country from New York to San Francisco.

The process of having murals painted for schools originates with the schools themselves. School principals and others interested in having the walls of their schools decorated should take up the question with the state director for the W.P.A. through the recognized channels in the community. Schools must be prepared to pay for materials and other non-labor costs, which run relatively low for the obvious reason that labor is by far the principal cost of the project.

The one type of mural that does not appear in the work of the Federal Art Project is the stereotyped

In his mural for Hawthorne School, Oak Park, Ill., Karl Kelpé has turned to the days when men and women worked together in wheat fields of the West for this panel, "Early Farmers."



academic allegory. The artists of today realize that empty and outworn symbols of justice, nobility and learning have no meaning to the youth in our schools. They are alive and forward-looking young people, keenly interested in their country and in all that is progressive and truthful. Pupils have taken deep interest both in completed murals and in the processes of fresco painting. They know that these works of art belong to

various materials, especially the relationship of mortar mixtures to colors. No matter what the medium, whether fresco, secco, tempera or oil, the mural technic has certain possibilities and limitations that the painter must respect. The mural must have definite relation to its surroundings and be an integral part of an architectural scheme. The color, the scale and the character of the painting must harmonize with the

the Lane Technical High School in Chicago.

Newell's mural, which forms a decorative sequence of panels on all four walls of the library where it is now installed, is executed in fresco secco. Its architectural balance, beauty of execution and sustained power in interpreting a tremendous theme won the artist the Gold Medal of the Architectural League in 1936. But what is of more importance is the



Two panels done for the music room of a Cincinnati school are typical of the excellent mural feeling that is developing in Ohio. Rhythmic interplay of color and light accents realistic forms, weaving them into a compact whole.

them in the deepest sense of the word.

The work of the mural painter is especially valuable in our schools in establishing a new community relationship between the artist and the public. "Mural painting," states Holger Cahill, national director of the Federal Art Project, "is not a studio art; by its very nature it is social. In its great periods it has always been associated with the expression of significant movements, the experience, history, ideas and beliefs of a community. As in the case of the murals done for hospitals, libraries and other public buildings, the frescos painted in American schools, under the W.P.A. Federal Art Project, represent a severe technical discipline.

"Mural painting, especially painting in true fresco, does not permit the individual variations possible in oil or water color. The problems of fresco painting are extremely complex. The painter must know exactly what he wants to do with the space and have a great deal of knowledge of the chemical relationships of

color, scale and character of the surrounding architecture. The composition as a whole must have clarity, largeness, carrying power and a rhythmic order that leads the eye easily through the whole space. Mural art is suited to large, simple forms and its color schemes are much more severely limited than those of the easel painter."

The largest number of murals for schools have been done in New York and in Chicago. However, other large cities, such as San Francisco, Los Angeles, Boston, Cleveland, Cincinnati, Detroit, Minneapolis, Milwaukee and Portland, have all employed their most talented artists in the creation of decorations that bring a new warmth and beauty into assembly rooms, libraries, music rooms and auditoriums that were formerly barren.

Among the most distinguished of the murals done in schools under the project are James Michael Newell's "The Evolution of Western Civilization" for the Evander Childs High School in New York and Edgar Britton's "The Evolution of Man" for

fact that this artist has produced a work that will be enjoyed by many generations of pupils, not only for its graphic depiction of the story of civilization but also for its beautiful design and color. Primitive man, medieval warriors, the days of the Renaissance and the whole drama of America's discovery and development are among the scenes portrayed.

Edgar Britton, who is generally recognized as one of the most brilliant of the younger Chicago artists, has also chosen a most ambitious theme, "The Evolution of Man," for his murals for Lane Technical High School. In this series of nine panels in fresco technic, each epoch in civilization is represented as a moment which gives an interpretation of the spirit of man in his periods of freedom or oppression, with their reasons and consequences. In this composition the pupil may see primitive man, alone in a world he could not understand; the Egyptian living under the watchful eye of his king and gods; Greek civilization with its recognition of individual achievements; the Middle Ages, in which the harshness of feudal power was tempered by the ideals of the church; the rebirth of scientific inquiry and imaginative life in the Renaissance, and the modern

world, seeking individual realization through the ideal of cooperative work and increased regard for one's fellow men.

Turning again to the murals in the New York schools, three other examples may be cited as typical instances of why such decorations have a strong appeal to pupils of various types and age groups. Strongly related to contemporary life are the three panels entitled "Power" done

ment with much promise for the future.

In the more decorative styles are the murals of Emanuel Jacobsen, Karl Kelpe, Gustav Dahlstrom and Anne Michalov. Jacobsen has gone back to the Chicago of 1880 in his decorations for the Horace Mann School in Oak Park, Ill. With fine architectural feeling and clarity of form he depicts an early schoolroom, an early living room and a pharmacy

pearing in elementary schools is Malcolm Hackett's charming interpretation of "Alice in Wonderland" for the Waters Elementary School, also in Chicago.

Among the murals that have been done for schools in the West are several that deal with the romantic period of early settlement. In the Mission High School in San Francisco, Edith Hamlin has pictured the days of the building of the missions



Emanuel Jacobsen has gone back to the Chicago of 1880 in his decorations for the Horace Mann School at Oak Park, Ill. With fine architectural feeling he depicts an early living room in one of a series of three mural panels.

by Eric Mose for the main library of Samuel Gompers High School. In this mural the world of electricity, actual yet essentially mystical, is the basis of a semiabstract design that is closely related to the mechanical interests of the youngsters of today. Strongly in contrast is Seymour Fogel's decoration for the music room of Abraham Lincoln High School in Brooklyn. He has chosen two strongly contrasting themes—primitive and classical music—and in colors and forms of almost tapestry-like quality has synthesized the spirit and rhythms of his subject. Tenderness and poetical feeling, combined with excellent spatial design, appear in Russel Speakman's "Children's Outdoor Life," a mural for grade school groups in P. S. 41 in New York City.

An equal diversity and spiritual awareness of the life of today characterize the work being done in Chicago. As is only natural, some of these muralists draw their inspiration from the life and history of the Middle West. Others turn to more imaginative themes. As a group they are extremely vigorous, revealing a wholesome movement in which strength of style and decorative treatment blend to build a vital move-

before the advent of soda fountains.

Karl Kelpe, another of the Illinois artists, has turned to the days when men and women worked together in the wheat fields or came to a weary halt after a day's trek in covered wagons, in his mural for the Hawthorne School.

Dahlstrom, in rural scenes for the Hugh Manley High School, has based his designs on color relationships that have been carefully considered both for their carrying power at a distance and for their scale relationship to the room which they adorn.

Exquisite color and rhythms combine with a spirited interpretation of animals in Anne Michalov's mural for the Mary Todd School at Aurora, Ill.

For children in the Burbank School, the life of the great naturalist gains a fresh significance through a mural in the library, executed by Andrene Kauffman, while Ralf Henriksen's "Incidents in the Life of Horace Mann" is equally illuminating to the pupils of Manley High School. Typical of the subjects ap-

in two panels that revivify the struggle to bring education into the wilderness. Reflecting the outdoor life of the West is a lively panel by Paschal Quackenbush, entitled "Picnic," which is installed in Morey Junior High School in Denver.

Besides the strong mural movement in Illinois, both Michigan and Ohio have a number of talented artists who work easily in large forms and have found an outlet for their talents in work for the schools. Gerald Mast in his four panel mural for the Clare High School at Clare, Mich., depicts "Farming," "Vocational Education," "Academic Education" and "Oil Fields." He combines symbolic figures with strongly realistic interpretation and shows a feeling for harmonious composition within the architectural limitations of his space. Two panels done for the music room of a Cincinnati High School are typical of the excellent mural feeling that is developing in Ohio. Imagination plays over realistic forms, weaving them into a compact whole, strongly accented by rhythmic interplay of color and light.

Tribulations of Small

Subject Combinations

HOPE springs with intensified vigor in the hearts of teachers from the time new school board members take office in early spring until school opens in the fall. This hope is the desire to obtain a better position, one offering a higher salary or, more important still, one requiring the teaching of subjects that the instructor is really prepared to teach.

These factors play important parts in the large turnover in teaching staffs that is in progress until the date school opens in the fall and even later. In fact, a survey made in one state revealed that two-thirds of all the schools reporting employed teachers after August 1st and nearly one-third, after September 1st.

No Concern for Schedules

There is little wonder that teachers anxiously cast about for readjustment when such unrelated subjects as English, home economics, algebra, ancient history and typing may be combined in a single teaching schedule. It would take the genius of Aristotle to be prepared adequately to teach in this number of fields. Yet this condition exists throughout the small schools of the country with apparently little concern regarding a solution for it.

The selection of teachers is one of the major duties devolving upon school administrators. Great care is exercised to see that the candidate has not the slightest physical defect, that she wears her clothes becomingly, that she is not too modern in her social ideas and that she will spend the majority of her week ends in town. If she sells her personality, her scholastic qualifications will be checked.

Specific state laws and local school board rulings make the observance of certain standards imperative. But there have been few, if any, standards set up regarding the subject combinations to be required of teach-

ers in the various fields of instruction. Far too many teachers are instructing classes not in the fields of their college majors at all, but in those fields in which they have received just enough credits to "get by" the state law.

A study was made recently under the direction of Dr. Harry K. Newburn at the State University of Iowa of teacher-subject combinations in that state. This study involved a consideration of the work of 4035 classroom teachers, 827 superintendents, 725 principals, 415 coaches and 99 supervisors in 879 Iowa schools. It revealed that in small schools in which a teacher is often expected to instruct in as many as three or more fields, peculiar subject combinations often appear. Chance has been the most important factor in determining what these combinations shall be.

However, the study mentioned shows somewhat definite trends toward the combination of certain subject fields in schools small enough to require teachers to instruct in more than one field.

Frequent Teaching Combinations

The following fields were found to be the most often combined in the programs of classroom teachers:

With English and speech are combined classes in social studies, home economics, languages, music and physical education. With social studies are combined English and speech, science, commerce and physical education. With mathematics come science, commerce, social studies and physical education. With commercial studies, the favorites are social studies, English and speech, physical education and mathematics. Science teachers draw mathematics, social studies and home economics

classes. Home economics teachers are asked oftenest to teach science. Foreign language teaching is combined with English and speech work. With the manual arts come agriculture and science.

The most frequent combinations of subject fields in the schedules of coaches were: physical education combined with social studies and science; social studies combined with physical education, science and manual arts; mathematics combined with science, manual arts and physical education, and science combined with physical education, social studies and manual arts.

Principals' Teaching Schedules

The teaching schedules of high school principals revealed the following subject field combinations as most frequent: mathematics combined with science, social studies and physical education; English and speech combined with social studies, mathematics and physical education; social studies combined with physical education and science.

Frequent subject field combinations in superintendents' teaching programs were: mathematics combined with science and social studies; social studies combined with science, manual arts, agriculture and physical education; science combined with social studies and manual arts.

Educators need to give more thought to setting up definite standards of subject field combinations that will be practical for the host of small school systems throughout our country. Until this fundamental need is accomplished we cannot hope to attain the degree of efficiency that is the goal of teacher training institutions, of those who hire teachers and of teachers themselves.

JOSEPHINE TEMPLETON HUYGENS

Lake Park, Iowa

Town Teaching

Social Hazards

PAUL HERBOLD

High School Teacher, Los Angeles

A CERTAIN type of personality is necessary to succeed in the small town teaching field. The individual should enjoy meeting and chatting with his fellow townsmen wherever he may chance to see them. He should enjoy the various functions given in the community and should not be averse to appointments to church and civic committees, serving willingly and with cheerful countenance. The closer he identifies himself with the life of the small town, the firmer he will be entrenched in his position. He should strive in every way to avoid partisanship (although this is a virtual impossibility) and should make an effort to be liked by all.

Certain teachers are able to do these things naturally and with genuine enjoyment. They become well known and well liked. Unfortunately only a few in the educational field can lay valid claim to personality traits that endear the teacher to the community.

Lacking the type of personality that will be acceptable to those living in a small town, it would be well not to take a small town teaching position. It is certain that the individual will be unhappy and dissatisfied and his work made ineffective if he finds himself in an environment that requires action in conflict with personal dictates.

Some teachers are retiring and do not enjoy meeting people. The great danger in a policy of seclusion is that if the retiring person happens to provoke one or two warlike women of the community to a crusade against him his position will soon be in extreme jeopardy. One or two women originating a movement to remove from the faculty a certain instructor can, in the course of two

After-school activities of small town youth are depicted in this oil panel for Hugh Manley High School, Chicago, by Gustav Dalstrom, W.P.A.



or three years, gain a sufficient number of adherents to their cause to make it appear that they represent a major sector of the community. Usually movements of this kind are clouded and shadowy. Rumor and innuendo are ever formless and difficult to evaluate as to scope and intensity. A handful of women can represent themselves to be the head of a great mass of public opinion. Ordinarily a board of education will not make the extended effort necessary either to substantiate the damaging assertions made against the teacher or to clear him. The easy course is to discharge the teacher and thus be rid of the source of contention. This policy is responsible for frequent replacements in the usually vain hope that another teacher can satisfy the public.

Drives against an individual teacher proceed by the spoken word and, hence, by hearsay. Individuals three or four times removed from the reputed source of a story or a situation will report the rumor in all its detail and as though the narrator had a personal and absolute knowledge of the facts. Members of the community who have never met the teacher and certainly never visited his classroom will repeat stories as to his teaching ability and cite them to be of their own knowledge. Naturally, no attempt is made to substantiate the truth or falsity of

the remarks being bandied about; human nature is such that nearly all of us delight in tearing down.

Teachers and ministers are alike in their need for invulnerability to gossip. It follows that the teacher as well as the clergyman must be guarded in his every public appearance and remark if he is safely to weather the storms that are so easily aroused in the shallow waters of the small town.

The wise teacher or administrator will not for a moment regard the small town as his ultimate resting place. He will think of it as a place to make a beginning. In it he will gain experience and make a living while he prepares for larger accomplishments elsewhere.

The small town and the rural schools offer an opportunity to do needed and excellent work. The children in those localities are definitely as deserving of the best in instruction as are the children in larger centers. From the teacher's viewpoint, however, the small community should be looked upon merely as a training ground, a place for gaining needed experience while rendering worth while service. When the objectives of the individual teacher have been accomplished he can then step out and up and leave for the untried oncoming teacher the opportunity offered by the small community.

Chalk Dust

LITTLE MARGARET came home from school with eyes a-sparkle. "Teacher and I played a new game today," she reported. "Teacher took me into the principal's office and showed me some funny pictures of a boy with an old clock instead of a face and a tea kettle with a spout on both sides and a funny shoe that buttoned up all over—and she asked me a lot of questions that were sillier than anything. She said it was a new kind of game for little boys and girls."

"Who won the game?" said mamma.

"I dunno," said little Margaret after some deep thought. "I guess nobody won that game."

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A SALUTE to that great American habit, the Morning Mail. In no case is it more prolific or diverse than on the desk of the school executive. After reading with deep concern the letter from a Complaining Mother about what happened to little Herbie's intimate attire on the playground slide and what are you going to do about it, and after indulging in a glorious moment of satisfaction while reading three distinct communications from three far distant P.-T. A.'s asking for three distinct speeches ("the treasury is depleted, but we know you will be glad to come without thought of compensation"), the Master turns to the more profound thinkers who send him monthly and weekly reports on such diverse subjects as the State of the Nation or Which Razor Blade to Buy. The board of education pays for these services in order that the executive may keep up with sociologic trends.

These informative letters should not be neglected by the schoolman. Among the newer services, he should discover the Institute for Propaganda to End All Propaganda, a worthy ideal and worthily presented by those who know.

Some have found that, with the aid of the institute, they have no further need for the better selling books on How and Why to Have Friends. The monthly letter peers into motives, teaches how to analyze and, withal, tells an interesting story.

Is the superintendent called names by elderly thankless groups of taxpayers who fail to appreciate his program of nursery schools? The institute will show him that such vituperations go well back into the dawn of history. Furthermore, with a careful study of the subject, he will be able to learn the art of name-calling himself if he is not already adept at it.

Has he recently hired a teacher on the strength of glowing testimonials from some erring brother? If so, he is not the first to be thus gulled. He may be taught by the institute that testimonial writing should be scrutinized with care. He will become a better schoolman because of such study.

Or does he want to build a new school? He may discover the vicissitudes of riding the Bandwagon, the good results that may accrue and the disasters that attend when the Bandwagon comes to an ignominious halt.

Schoolmen cannot afford to miss the monthly letters on propaganda. The reading thereof is time well taken from the morning visit with the secretary.

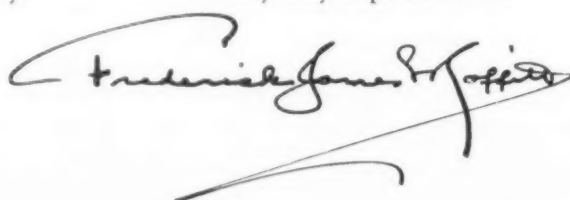
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OUR short short story. S-h-r-r-i-i-l-l. As he blew his whistle, the policeman waved a warning finger in the air. One car alone failed to stop. "Madam," said the cop gallantly to the offender, "are you so deleted dumb that you didn't know what I meant when I raised my hand?" "Well, I certainly did," responded the lady-at-the-wheel, indignantly. "How do you think I have been a teacher thirty years and don't know what that means?"

• •

FEELING down, brother? Has the day lost its savor because of minor problems? Have the halls been overly noisy? Or the kids extra dumb? Or the parents unusually petty?

Tomorrow is another day. Remember, then, that the misshapen annoyances that beset you may evolve into a pattern of service wherein many a prophet from Plato to Dewey has found as perfect a life as many may hope to attain.



State Aid for Construction

LEE M. THURSTON

University of Pittsburgh

SCHOOL BUILDING construction in the United States is today primarily a local responsibility. Few states contribute money for school plant construction. This holds true despite the fact that a large proportion of school districts, particularly in rural areas, are unable to finance needed buildings and that many states stand in need of school district reorganization for economy and educational efficiency. The state-aided school plant program as a lever for reorganization is little used.

There can be little doubt of the need for state-aided school building programs. Eighteen states have completed or initiated state-wide surveys of school building needs during the last four years. Twelve of these states estimate needed expenditures as follows: Arkansas, \$10,600,000; California, excluding its three largest cities, \$82,109,000; Delaware, \$3,000,000; Florida, \$11,628,600; Idaho, \$3,014,750; Kentucky, \$25,000,000; Michigan, \$50,000,000; Minnesota, \$48,900,000; Mississippi, \$50,000,000; Missouri, \$40,000,000; Texas, \$46,500,000; West Virginia, for consolidations only, \$12,775,000. That any of these states could carry forward programs of such magnitude without some form of state aid is doubtful.

Reports from the departments of education of all the states except five (Maryland, New Mexico, South Carolina, Vermont, Virginia) indicate that only six states are now providing financial aid to school districts for the construction of buildings. Alabama, Missouri, New York, Oklahoma, Tennessee and Washington use state funds for local building construction, chiefly to stimulate the centralization of schools. In a few other states the regular state apportionment for current expenses is used for capital outlay, even though such use may be illegal. No state currently furnishes as much as a million dollars a



This one room brick school would have been abandoned under the Thompson Plan of Pennsylvania, providing funds in inverse proportion to wealth.

year for local school plant construction.

A number of states are now weighing proposals to enter more actively into the school building field, many of them doubtless stimulated by the prospect of continued federal aid. Alabama, now giving \$860,000 for school buildings in rural areas, is considering a one-seventh increase in this amount and the addition of aid for school buildings in cities. Tennessee, now furnishing \$7500 yearly for consolidation, may increase this sum by \$10,000. California is considering a state appropriation to pay the difference between the cost of needed housing and the amount the district can raise under present legal limitations, wherever the district organization is justified in the judgment of the state department of education.

Florida is hopeful of obtaining a state minimum program in which 10 per cent of the annual state appropriation would go into a building fund. The Massachusetts School Superintendents' Association has proposed a new state aid appropriation for

schools, some of which might find its way into building construction. Minnesota, which gave school building aid to consolidated districts until three years ago, is again considering assistance to school districts unable to finance construction from local sources.

North Carolina, in which the borrowing power of counties was recently curtailed by constitutional amendment, has studied school building aid through a governor's commission, which recommended that 25 per cent of the cost of consolidations be met by the state. Pennsylvania's general assembly in 1938 enacted the Thompson Plan by which the state would assist local districts in building construction in inverse proportion to local wealth. This \$91,000,000 program, originally planned for financing from P.W.A., state and local funds, is now sidetracked because of insufficient state appropriation. In West Virginia the state superintendent of free schools recently recommended an appropriation by the legislature of one million dollars for school building purposes in the state.

Such proposals are evidence of increasing recognition of the inability of local units to finance school buildings and of the importance of state participation in planning the spacing and design of buildings. Of 43 states, 27 mention, as being an acute problem, the organization of larger administrative units and attendance areas; 24 mention the need of special building aid to districts of little taxable wealth; 17, the need of providing buildings for consolidated or centralized schools; 14, the modernization of obsolete buildings; 11, state aid for all classes of public school construction, and 16, the elimination of one room and two room schools.

Certain common factors are preventing local action in the field of school plant improvement. Seventeen states report that low assessed valuations are an effective deterrent; 11 states report debt limitations, and 10 states report tax limitations. A dozen states report such factors as insufficient wealth, unequal distribution of wealth, poor tax collections and the channeling of taxes to nonschool purposes as reasons for inability to construct needed buildings.

When these factors are summed, it would appear that in many states the local district is effectively hamstrung with respect to its financial powers and that the only escape from a chronic building shortage is to shift the base of support in the direction of the state.

It is an axiom that the wealth of the state should educate the children of the state without reference to where the wealth may be centered or where the children may reside. This principle of equalization applies to capital as well as to current costs. Many districts of negligible wealth stand in grave need of buildings they cannot afford to buy. When the state shares their costs of operation it can with equal justice share their costs of building. In this way the state can use the leverage of a school plant program to prevent the perpetuation of school units in which a decent standard of education is impossible.

The evidence shows that the states are inclining toward this view and that a general tendency toward greater state participation in school building programs may be anticipated.

Youth Is Not Unconcerned

DAVID D. HENRY

Wayne University

MANY critics of the present day are viewing with alarm what they call the indifference of young people to the problems of democracy. These alarmists usually take a side-long glance at public education and suggest that the schools have not done all they should have done in training for citizenship. We are told that the youth movements of Germany, Russia and other nations led to revolutions of government and that the seeming lack of aggressive interest in the problems of democracy may make America susceptible to the inroad of "isms" in this country.

It is probably true that young people generally are not personally aroused over the specific problems of government and are more or less undisturbed by the sometimes hysterical shouts concerning fascism and communism. It is reasonable to interpret this seeming indifference as essentially wholesome. People are generally indifferent to things that they take for granted. Patriotism is a highly personal emotion, an emotion that is deeply stirred only at times of great crises. I do not think it is to be assumed, simply because people do not parade their emotions, that they are necessarily unconcerned about the things related to those emotions.

To agree with the critics of young America on this point would place one in the position of saying that because young people do not talk about their homes and their parents means that they have no regard for their homes and their parents; that because they say little, demonstrate little about their religions, they have no religion. We know these deductions are not true; frequently the things that mean the most to us are the things we take for granted and show the least concern about until a crisis is actually impending in this country.

The patriotism of the younger generation should not be questioned.

Its members perceive no crisis and they are not willing to accept the hysterical shouts of alarmists as crises. This very indifference may be an index of basic poise and stability of American youth of this generation.

There is a line in Shakespeare: "The lady doth protest too much, methinks." The human psychology in this reference has always been accepted.

Speeches, talk, agitation, parades and other displays of emotion are not necessarily indices to true feeling. Democracy means as much to young America as it does to old America, and when any genuine crisis arrives, youth will be as alert to the significance of its social inheritance as the youth of any other generation has been.

Correlary Thoughts

1. Schools have done as much as possible in educating youth for democracy in a world that, socially, is essentially undemocratic.

2. Democracy in human affairs is more than a form of government. It is a philosophy of life that America has never practiced.

3. Young people, particularly, are aware of the inconsistency of preaching democracy on the one hand and failing to practice it on the other, for they do not see it demonstrated in the realm of social affairs and they perceive the vested interest controls of government.

4. The schools' great contribution has come, not by any general preachments, not by rationalizing the apparent inconsistencies, but by directing the attention of pupils to specific ideals of the general democratic pattern, such as the importance of independent thought and judgment, freedom of speech, freedom of thought and the general concept of the liberties of the people. And these are issues, we can say honestly, to which young people are much alive in this country today.

A Counselor Considers Grades

EDWINA B. HOGADONE

Rochester Athenaeum and Mechanics Institute

PROGRESSIVE schools have come a long way from the time when Johnnie Jones was selected valedictorian of his class because his average was one-eighth point higher than Mary Smith's, but any guidance officer knows that we have not solved all our problems in dealing with grading systems. It is still much too common to find reports reading like this: mathematics, C; English, B; psychology, C; dependability, D; initiative, C.

Just what does this information mean to a counselor? Does the "C" grade in mathematics mean that the pupil is doing just average work? Or is he conscientiously working up to the best of his ability? Does he solve half the problems perfectly and omit the others? Or does he do a mediocre job on all of them? Specifically, what does he need to do if he wants to improve his performance?

These questions may well be raised concerning the rest of the grades. Since the guidance counselor is concerned with growth of pupils in all areas of activity, he must have specific information regarding pupils as they function in those areas.

The Rochester Athenaeum and

Mechanics Institute has for many years faced the problem of obtaining adequate information for counseling purposes. As a means of meeting one aspect of this need, the behavior journal was developed. This document includes a comprehensive journal of objectively recorded incidents of student behavior. This record is not enough. Although the behavior journal gives general information regarding various student activities, it does not provide a systematic record of the individual's scholastic progress. We were forced inevitably to realize that we needed more than a symbol grade in order to interpret the student's progress in the scholastic area. To meet this problem, the department of retailing developed statement or paragraph grades.

We have selected several typical examples, illustrating the type of grade the student receives. Our first example of a statement grade is taken from the report of Student X in Color and Design, a freshman technical subject. (See type 1.)

This type of grade gives the student a clear understanding of his progress during a stated period in

school. In addition, it gives the counselor a valuable source of guidance material. It is evident from this report that the student needs counseling in the proper use of study time and in the importance of punctuality in completing work. There may be some fundamental reason back of this individual's apparent inability to systematize his work. He may have acquired poor study habits early in his school career or perhaps his home situation is not conducive to study.

This lack of organization may show up on his cooperative job and may affect the quality of his work in that area. Naturally his performance in other subjects needs to be considered in order to determine whether or not these characteristics are habitual. However, through an analysis of this grade alone we are able to get at many fundamental points in this student's development.

Type 1

Your oral participation is highly satisfactory and you have demonstrated understanding of the principles in your examples. However, you have completed only two-thirds of your assignments for the block, as the entire unit on harmony is missing. I feel that you should give attention to better use of laboratory time and to greater concentration when doing assignments. You will find that this will enable you to do your work more rapidly and to complete assignments within the allotted time. Please try to make up the missing work outside of school hours.

Type 2

You have made definite progress in Merchandising this month. Your written and oral work is of satisfactory quality. I would suggest that upon your return to the store you observe the relative amount of mark-up on various items in your department. Judging by your performance on the classification examination in retail mathematics and by the intelligent understanding which you show in merchandising information, I believe that you may earn honors in this subject. Before you return to school, why not prepare for honor achievement by reviewing the merchandising mathematics that we have covered so far?

Type 3

Your discussion of external achievements which contribute to your life goal and your discussion of the meaning of life are both excellent. You seem to be avoiding prejudices and clearly thinking through your philosophy of life. You yourself recognize the need of speaking out more effectively in groups; next month's philosophy class is a good place to practice it, for your thoughtfulness would justify you in taking a leading part. Meanwhile, good luck on your "cultural progress." This month you have gone beyond normal requirements and won honors in the course.

Type 4

"Your vocational objectives seem clearly defined and you have a definite plan of work," or "You have shown oral evidence of meeting objectives by the quality of your contribution to class discussion."

Let us take another example of a statement grade. Instead of receiving "B" in Merchandising, Student Y received the type 2 statement.

In addition to telling Student Y that he has made satisfactory progress in the written and oral area, this statement points out to him the importance of observation on the job of principles discussed in class. In the use of this grade the counselor has the opportunity to commend the student on his satisfactory performance, to reiterate the importance of observation on the job and to point out his opportunity to earn honor achievement.

Grade Is More Than Symbol

As a final illustration of the use of these grades we are quoting Student Z's grade statement in one of our liberal courses, Philosophy, type 3.

In this case the progress of Student Z is obviously of "A" quality. However, a grade of this type goes farther than the symbol "A." Both the counselor and the student have a clear understanding of the areas in which he has excelled as well as a concrete suggestion for further improvement. In addition, the counselor has an opportunity to compliment the student in specific terms with reference to his actual performance rather than in a general way.

When we inaugurated this system of grading, we were confronted with a good many problems. First of all, we had to face the fact that writing statement grades is a time-consuming process. In an attempt to meet this difficulty we worked out two technics. Since each course is based on certain carefully selected objectives, instructors made a list of the objectives that were covered during the period of grading. Using this list as a basis, they were able to decrease somewhat the time involved in writing statements. Our second technic was to devise a check list consisting of statements regarding the work. These statements were carefully worded in terms of the course objectives; instructors checked certain statements for each individual student. The department secretary then assembled these statements into one paragraph, which became the grade.

In trying to cure our difficulty by

means of a check list, we ran into our next problem, the tendency to use impersonal, stereotyped words and phrases. We partially met this difficulty by the use of the personal pronoun "you." An example is: "You have made definite progress this month," instead of "Definite progress was made this month."

We have not completely solved the problem of avoiding stereotyped words and phrases. Some instructors, instead of writing all the grades at one time, write a limited number in the belief that a fresh start helps them vary their expression. In some cases there has been deliberate introduction of a reference to a special interest of the student. For example: "Meanwhile, good luck with your efforts in writing poetry, and with all else that contributes to your cultural development."

Perhaps the most significant problem from the point of view of our educational philosophy was that we tended to write statements entirely on subject-matter mastery rather than on behavior and development in the area of scholarship. Such statements as "You have failed to hand in unit VIII," or "Illustrations are omitted from questions 1, 2, 3, 4" refer to subject-matter mastery only. On the other hand, statements in terms of student behavior in the scholastic area give a concrete picture of the student's progress. For example, see type 4.

Developing Useful Technic

As we work more and more with this system, we are developing useful technics. We find that we need not confine our statements to comments regarding past performance of students; we may supplement these comments by concrete suggestions for future work. We have also found great value in occasional comments on the student's progress on the job and in a final summary by the counselor, which serves to review and to interpret the general characteristics of the student's performance.

Although this system of grading has added immeasurably to the work of instructors, they consider that the benefits gained are greater than the effort involved. In general, their feeling is such that a grade tends to establish better rapport between stu-

dent and instructor, that the student can be led to compare his own progress from month to month and to work for the attainment of his objectives in the course. In addition, it is possible to express varying degrees of thought about a student's progress, which would be impossible under the A, B, C, D system.

At first, students who have been accustomed to the numerical or symbol type of grades find it fairly difficult to make the adjustment. However, we believed it desirable to make a clear break from the old system rather than compromise by including a symbol grade along with the statement, because such a compromise would reduce the statement grade to a mere footnote.

Full Explanation for Freshmen

In order to overcome the difficulty of student adjustment to the lack of a symbol grade, we explain the system carefully to freshmen before they receive their first reports and we follow this with individual conferences after they have received the grades. It is essential for each student to have an opportunity to raise questions about his own record or about the system in general. The majority of student reactions have been favorable.

Cooperative employers have always been interested in the school progress of their student employees, and they have shown an increased interest in the grades now that they are informed regarding each student's specific progress. The counselor's summary is particularly valuable to the busy executive because it gives him a quick picture of the entire report.

After four years' use of statement grades, we have been able to form a good estimate of their advantages and disadvantages. As an aid to efficient guidance and counseling, they are invaluable. Parents and cooperative employers find that statement grades give them really specific information about the progress of the student as an individual.

In the illustrations given it will be noted that there are references to periods when the student is not in school, but is cooperatively employed. The department of retailing at the institute operates on the cooperative plan with students alternating each month of school attendance with a month of retail employment.

Portfolio of SUMMER RENOVATIONS



1939				
JUNE				
1939	Mon.	Wed.	Thurs.	Fri. Sat.
			1	2 3
				9 10
				17



1939		JULY	
Sun.	Mon.	Wed.	Thurs.



1939							AUGUST							1939	
Sun.		Mon.		Tues.		Wed.		Thurs.		Fri.		Sat.			
6		7		8		9		10		11		12			
13		14		15		16		17		18		19			
20		21		22		23		24		25		26			
27		28		29		30		31							

Ready for Summer

JOHN A. LEWIS

WITH unlimited funds the planning of a summer maintenance program would present no difficulties. With limited budgets, however, and much desirable work to be done, the choice of what is to be done is most important.

After setting up the necessary reserve for current maintenance throughout the year, the balance remaining determines what is available for summer maintenance and improvements. Categories of each type of work are set up and the particular jobs needed under each, with an estimate of cost. The categories include such items as: essential alterations; exterior painting, roof repairs, pointing, waterproofing and other exterior repair items; repairs to interior; painting; electrical repairs, including new wiring, new fixtures, new distribution systems, new fire alarm and program systems; modernization of heating and plumbing, and repairs to equipment.

The first demand upon funds will be for the essential alterations in buildings required by changes in the educational program as a result of changes in population or curriculum. The second demand will be for those items required for the maintenance of exteriors—exterior painting of wood and metal, care of roofs, calking, pointing and waterproofing of any leaking walls. Not until these needs are met should consideration be given to absolutely essential items of interior maintenance.

It is essential that all needed repairs be made to flashings, gutters and downspouts, and that roof leaks be stopped. All exterior hardware and panic devices should be put in good working condition. All decayed portions of sash and frames should be replaced, especially if exterior painting is to be done. If the surface of the window sills has deteriorated, this must be scraped down to good solid wood before painting is done. All cracks in the woodwork through which water will enter should be calked or filled. Otherwise, the painting will not hold up and the deterioration will continue unchecked.

A central office control record should be kept of all exterior painting

showing the date when the painting was last done and its cost. All exterior painting should be programmed on a cycle of from three to five years, depending largely on geographical factors. Most school systems find a lead and oil paint with approximately 15 per cent of zinc oxide highly satisfactory. Too much zinc oxide will result in too hard a finish, making an unsatisfactory surface for repainting; too little zinc will result in excessive chalking. Care should be taken in painting to see that all cracks, particularly small cracks in sash, are filled to provide a moisture-proof surface to prevent rotting.

The painting of exterior metal should usually be programmed on a shorter cycle than the painting of exterior wood. Otherwise, excessive corrosion not only will shorten the life of the metal but will make the clean-

ing and removal of rust, preparatory for repainting, more expensive. Most school systems are using a red lead primer on exterior metal, but the use of chromate primers and primers of a polymerized oil type has been gaining in favor.

Many school systems, relying on the ten or twenty year guarantee on built-up roofs on new construction, have not provided any maintenance during this period. In most cases such roofs will last for the guaranteed period without attention but, in the absence of maintenance, they will give excessive trouble thereafter. Other school systems have adopted what appears to be a much more enlightened policy of inspecting all roofs, including those under guarantee, and of touching up any areas that seem to require it. Such a policy will pay heavy dividends in the years to come, in the way of reduced

Inspection of fire hose, extinguishers and similar equipment should be routine. The summer is the time to inspect closets, storerooms and basements for accumulations of materials that may be fire hazards.



Renovation

Assistant Superintendent
Baltimore

maintenance cost and indefinite extension of the life of such roofs.

Anyone having a problem of leaking masonry walls will find much information in the "Building Materials and Structure Report BMS 7—Water Permeability of Masonry Walls"* issued by the Bureau of Standards, October 1938. This report discusses in detail the effect of such factors as the type of brick, composition of mortar and types and quality of workmanship. After a study of all the factors involved, the report concludes that workmanship is the most important. The report also discusses surface waterproofing, including repointing of face joints, and the successful application of various waterproofing compounds.

If a school system has a large amount of repointing, the purchase of pneumatic or electric hammers will prove economical in cutting out old joints. Because of the noise involved in cutting out joints and because any waterproofing solution must be applied in hot weather, such work is essentially a part of a summer maintenance program.

Many school systems, because of the difficulty of proper supervision, handle all exterior painting with their own maintenance force; they, therefore, find it impossible to carry the full load of interior painting with the school board's own painters and must contract for at least part of the work. When contracts are let for interior painting the necessity of close supervision is exceedingly great.

When the original paint is of proper quality much repainting can be delayed by a carefully planned wall washing program. Janitors may be used for this work during the summer but only after careful training in proper methods and under proper control and supervision.

The accumulation of a gray scale on blackboards, usually from the clay

When the original paint is of proper quality repainting jobs may be postponed by a carefully planned program of wall washing. This can be done either by the school force or under contract.



binder of chalk, in time interferes with the usefulness of the blackboard. Many of the larger school systems, as a part of the summer repair program, use a blackboard resurfacing machine to remove accumulation of scale. This is a rotary drum sander (with dust bag), which is run by a motor connected to the head by a flexible shaft. The resanding is usually followed by the application of a blackboard stain or dye. In a small system in which the amount of work does not justify the purchase of such a machine, an equally good result may be had by the hand method of using honing stones.

Another type of summer maintenance work is the hardening and dustproofing of concrete floors. One method is to use a solution of magnesium fluosilicate or a mixture of zinc and magnesium fluosilicates. The solutions are made up by dissolving $\frac{1}{2}$ pound of fluosilicate and 1 gallon of water for the first application and 2 pounds per gallon for subsequent applications.

No summer program would be complete without repairs to furniture and equipment. This may take the form of refinishing (sometimes including sanding) either in the school

or at a central point or both. Any fixed type of furniture should be tightened as required. Loosened locker bolts may be tightened by the use of a special type of socket wrench. Chemistry tables should be examined and any leaks repaired to prevent deterioration. Window shades should be repaired and renewed.

When a qualified man is available, office equipment, such as typewriters and adding machines, should be cleaned and oiled. When compressed air is available one excellent method of cleaning and oiling is to remove all rubber, such as platens, feet rolls and feet, from the machine and, after blowing loose dust from the machine, to immerse it in a tank containing a petroleum solvent, into which has been poured a small quantity of light machine oil (in the proportion of 1 quart of oil to each 5 gallons of solvent). The blower should be used on the machine while it is immersed and also after it has been removed and has had a chance to drain. The machine will be thoroughly cleaned and will have the benefit of the proper amount of lubrication.

Gas equipment should be carefully inspected (occasionally with the co-

(Continued on page 47)

*Available from the Superintendent of Documents, Washington, D. C., 10 cents.

Summer Work Schedule

K. P. GRABARKIEWICZ

Assistant Superintendent of Operations
Teachers College, Columbia University

PREPARATION for summer renovation should begin several weeks prior to the closing of school when the custodian makes a complete survey of the buildings. He then ascertains the needs and plans a definite and continuous program of cleaning and reconditioning. A list of needed repairs and replacements may be kept during the entire school year, divided into various columns and labeled "emergency," "imperative" and "desirable." This serves as a check list in making inspection and as a guide for requisitioning repairs and replacements.

Although the custodian cannot be expected to make major renovations, he should be capable of ascertaining and requisitioning such repairs as: carpentry, calking of brick work and masonry, glazing, painting, roof repair, weather stripping, furniture repairs, shade repairs and tile work. He should also prepare in advance a cleaning schedule so that the persons responsible may have some idea as to the amount of work to be done and the time it should be finished.

Before Teachers Leave

Teachers' closets and shelving may best be cleaned when the teacher is present to supervise the storing of books and equipment. The closets, therefore, are cleaned and in order at the close of the term, and the teacher knows that her supplies and materials will be found in the same location when she returns. Closet floors may be left for cleaning and treating later. Teachers should label keys to rooms, desks, closets and cabinets and should turn them over to the custodian or place them in a locked cabinet where they will be accessible in an emergency.

Before school is closed cards, loose pictures and bric-a-brac should be removed from classroom windows, bulletin boards and shelves and stored. After school is dismissed useless books, rulers, papers, clothing and shoes should be removed from desks, closets and classrooms. The rooms

should then be made ready for a later thorough cleaning.

Blackboards and erasers must be cleaned. In some cases the blackboards will require refinishing with carborundum stones.

All ink wells should be gathered and placed in a container under a faucet. Allow the water to run over them and stir occasionally with a paddle until the water runs off clean. The residue left in the ink wells can then be removed by using some good commercial cleaner or by dissolving 1 pound of trisodium phosphate in 8 quarts of water and immersing the unclean ink wells into the solution. After they stand in the solution for ten or twelve hours, they can be rinsed with clean water and placed on a cardboard to dry.

The entire building should then be swept from attic to basement and all furniture put in its regular place.

Vitreous china, such as drinking fountains, toilet bowls, urinals, sinks and washbowls should be given a thorough cleaning, the drains and drain piping from urinals being inspected for lime and other deposits. In some cases it may be necessary to clean drain pipes with muriatic acid to remove heavy deposits of lime and other materials that may cause an objectionable odor. It is well to shut off the water from the urinals but the flush tanks should be kept filled. The floors of toilets should be well cleaned and given a coat of floor seal, if necessary. A light application of wax to vitreous china surfaces gives the fixtures a pleasing appearance.

All boiler cleaning should be accomplished within two weeks after the close of the school term. It is suggested that the work be done in the following manner: Clean all soot and fly-ash from breechings, smoke connections and stack pits. Sweep and wire-brush the boiler heads. Clean all boiler tubes with the flue cleaner. After cleaning, coat the tubes with oil to prevent their rusting during the idle months. Clean the soot and fly-ash from the combustion

chambers. This may be wet down a day or two in advance to facilitate handling. Clean and wire-brush the shell of the boilers. Clean the clinkers and other obstructions from the grates and ash pits of the boilers. Mark all handhole and manhole plates and remove from the boiler. Clean and replace gaskets. Clean all scale and sediment from the water side of the boiler. Remove the water gauge glasses and clean and store them to keep them from breaking. Remove the plugs from the water column connections and see that the passages are clear. Clean and remove the steam gauges, then store them in an accessible place for testing by the boiler inspector.

Cleaning Mechanical Equipment

It is well to protect the fire sides of the boilers (tubes, shell, heads, breechings and smoke connections) by giving them a coat of black paint or old oil to prevent rust and corrosion during idle periods. In some instances boilers may be laid up full of water but, if the atmosphere is comparatively dry, the boilers may be left open to allow free air circulation through both the fire and water sides.

All old packing should be removed from valve and piston rods of pumps and engines to prevent corrosion and to ensure renewal of packing before the equipment is put back into service. The ventilating fans should be cleaned inside and outside and, if possible, the air ducts and plenum chambers should be given a thorough cleaning.

On all mechanical equipment having rotary shafting, the bearings and oil reservoirs should be cleaned and refilled with clean, new oil. Never leave one of these bearings without oil. Bearings using hard oil should be filled with grease several times to ensure a new and clean supply.

The tanks, eliminators, drains and all parts of air washers or filters should be thoroughly cleaned.

Hot water storage tanks, catch basins, receiving tanks and other tanks should be opened and cleaned thoroughly on the inside and outside. Ceilings, walls, piping and all the

Common Sense and the School Plant

ARTHUR B. MOEHLMAN

BUILDINGS begin to deteriorate as soon as they are completed. Rain and dust, sleet and snow, wind and chemical reactions start their slow and relentless siege whenever materials are so placed that they offer a surface for attack. Inside, the normal processes of disintegration are assisted nobly by the punishment that children, youth and even adults unconsciously give a public building.

Neglect in the upkeep of the physical plant inevitably demands a heavy toll while an insignificant timely repair may save the thousands of dollars that continued carelessness eventually demands.

The constant observation of small details required for the early discovery of repair needs cannot be accomplished through delegation of this responsibility to custodial personnel or to school plant superintendents alone. While they are competent to study the effect of weathering on exteriors and of noting gross defects in floors and walls, the intelligent cooperation of the teaching staff is necessary to cover every aspect of a building's demands. Teachers should be encouraged to report minor defects in classrooms and in other interior facilities. These teacher reports, summarized monthly by the principal, can be quickly transmitted to the superintendent's office where they may receive immediate attention or may be scheduled for correction during the summer holiday.

Minor repairs may be made week-ends and after school during the academic year, but summertime offers the real opportunity for essential school plant

renovation and rehabilitation. The needs for repairs gathered throughout the year have been studied and provided for in the budget. New appropriations become legally available in July and make possible the completion of major repair jobs.

The first attack should be directed to repairs in the physical structure which promise to be costly if neglected for any length of time. These include the roof, outside walls, doors, windows and site drainage. Attention should next be centered on those features that are a menace to pupil and building safety. Obscure closets and dark corners need checking against an accumulation of fire hazards; stairs and stair rails may need attention; storerooms require fireproofing or sprinkler systems if they contain combustible materials; the heating plant must be inspected for small weaknesses; the wiring system demands elimination of potential short circuits; toilet room odors may mean loose connections or cracked fixtures; window shades must be inspected for translucence and mechanical condition.

A third factor in summer building renovation is the "brightening up" of building and grounds. While these activities are not basically essential, they pay large educational and social dividends. The community reaction to the school is frequently conditioned by the effect of the school upon pupils, parents and citizens. Intelligent renovation of the physical plant during the summer months is a good educational as well as a good plant investment.

equipment in the boiler room and mechanical equipment rooms should be thoroughly cleaned.

After this work has been completed, the housekeeping cleaning schedule can begin. Dust ceilings, walls, curtains, windows, woodwork, pictures, lampshades and every exposed surface carefully. This can be done with a wall duster or an ordinary floor brush having a long handle. One person should be able to dust a classroom in an hour.

All gum and other deposits should be removed from seats, desks and furniture. The furniture can then be cleaned and given an application of furniture polish or wax.

All painted, enameled and varnished woodwork should be cleaned, including window frames, doors, wainscoting, moldings and shelves. Walls should be cleaned as high as

the blackboards. (The upper surfaces of walls and the ceilings are usually cleaned every third or fourth year.) It is well to give painted and varnished surfaces that are frequently touched an application of wax to facilitate removal of finger marks during the school term.

When the woodwork is varnished and in good condition the cleaning and polishing may often be completed within two hours per classroom. However it may require as long as six hours to clean and polish the same amount if it is painted and in an extremely soiled condition. Care should be exercised in using strong solutions for cleaning woodwork, especially if the paint has been subjected to repeated washings. The solutions should be strong enough to remove the dirt without causing damage to the paint.

The next step is the cleaning and reconditioning of classroom floors. This includes the cleaning of radiators, closet floors and floors beneath pipe flanges. If the floor has been properly sealed and given reasonable care during the school term, it may only need a cleaning with steel wool at the less worn areas and a light application of maintaining seal in the worn areas. This is followed by an application of floor wax and then a polishing. Assuming that proper equipment and materials are supplied, it should not take more than two or three hours per room for complete reconditioning. Hardwood floors that have not been sealed should be given a thorough reconditioning of sanding, sealing, waxing and polishing.

Glass should be cleaned just prior to the opening of the fall session.

It is better to have two men washing glass as a crew, one man on the inside and the other on the outside. This saves the trouble of making extra trips through the window when spots have been missed. In most cases water is used as the cleaning agent. This is applied with a damp cloth and the glass is dried with a chamois skin. Two men should clean all of the glass of an ordinary classroom in from forty to fifty minutes.

The cleaning and reconditioning of the average classroom (26 by 30 by

14 feet) can be accomplished in from sixteen to eighteen hours.

Processes	Hours
Dusting walls, ceilings, woodwork, pictures	2
Cleaning and polishing furniture.....	4
Washing and polishing woodwork and walls	6
Cleaning and reconditioning floors.....	4
Cleaning glass	1

For elementary schools, the approximate number of eight hour man days required for summer cleaning and renovation can be computed by dividing the total floor area, in

square feet, by 450. This includes the cleaning and care of all mechanical equipment, the care of lawns and an occasional dusting and sweeping of floors to keep them in a presentable condition. For high schools and colleges, the floor area may be divided by 550 to compute the number of man days required to clean and recondition a building during the summer vacation.

Additional time and man power will be required in schools in which lawns are excessively large and in which considerable care is to be given to trees, shrubbery and landscaping. The location and condition of the building must also be taken into consideration, along with the age of the building and the type of mechanical equipment.

The time allowed for summer renovation should be exclusive of the time required for the daily cleaning and service given to special activities, such as playground supervision, night school and summer school.

A number of duties to be carried out during vacation periods cannot be classed as renovation work. They include: care of walks and light wells; picking up paper from grounds; ventilating the building to keep the floors from warping; polishing the hardware and occasional dusting; sweeping of stairs, corridors and classrooms; reading and recording meters; making out reports; inspecting roofs and attics; examining boilers and mechanical equipment to see whether they are being kept in a dry and noncorrosive condition; locking gates, doors and windows, and making minor repairs to plumbing.

A week prior to the opening of school, the entire heating plant should be placed in operation and should be given a thorough test. All mechanical equipment should be put into operation and its condition noted so that repairs can be made in time. Leaky valves, joints and fittings should be repaired. Ink wells should be filled and placed in their respective rooms. Clocks should be checked and set. Fire alarms should be tested and reported, if out of order. Erasers should be replaced. All rooms should be given a thorough sweeping and dusting. Towel receptacles should be filled and toilets should be inspected to ensure water supply and cleanliness.

How Much Renovation?

WALTER McLAIN

Board of Education, Ottumwa, Iowa

WHAT should be the limit for summer repairs and renovation? In Ottumwa, Iowa, a few years back, it was discovered that about twice as much was being spent for this purpose as the average school district in the state was spending. Nearly 11 per cent of the total operating expense was going into replacing the wear and tear on Ottumwa's 14 school properties and equipment. The average over the state was slightly under 5 per cent. So the last few years we have curtailed our activities and we are now spending only from 5 to 6 per cent for renovation of all kinds.

Early in February of each year the maintenance department prepares detailed lists of what should be done during the spring and summer months. These lists are checked against similar ones submitted by the principals of each building. Estimates are made of the cost of all this work and then are compared with average amounts spent in previous years. Principals and custodians confer with the maintenance department head and a final list is drafted.

Late in March the board of education visits each school and inspects major improvements and renovation plans. Through the members' varied experience and knowledge, they can offer much of value in the way of suggestions regarding the programmed work. After the program has been approved, work is

well under way by the close of school.

A program of washing and refinishing desks is planned for various schools each year. Several buildings have floors relaid or refinished and sealed during the summer.

All redecorating is done by the regular custodial staff at great saving to the taxpayers. Over a long period of years the men have become proficient in this work; they do expert painting. Some workmen are better carpenters than painters and they are organized to lay floors and to do special repair work. It has been found that it pays to send practically the entire custodial staff to a four day training school at Ames, an extension department of the Iowa State College. This plan has been followed for five years. Throughout the year the college maintains a regular program of bulletins about improved cleaning methods and various problems faced by the custodian each day.

It has always seemed to be an important item of economy to maintain the school properties in first-class shape. Even during the worst of the depression period, from 8 to 10 per cent of the total operating expenses in the school system of Ottumwa was being spent for maintenance of all kinds. The result is that now our properties can be maintained for 5 or 6 per cent each year and a little more can be applied to instruction and to other departments of the school program.

Resurfacing Slate Blackboards

WALTER C. HAWKINS

Superintendent of Buildings, Freeport, N. Y.

LOOK at the surface of a slate blackboard under a microscope and many minute pores will be revealed. From the minute a chalk mark is placed on the slate blackboard, is erased and the board is washed, these small pores start to fill up with the residue of the chalk and deterioration starts. Finally, after years of use, what was once a velvet-finish has become pitted and rough. The surface no longer shows the sharp contrast between the white chalk and the dark surface. The period of time over which this happens depends upon three factors, two of which can be controlled: (1) the kind of chalk used; (2) the amount of use, and (3) the kind of care in cleaning and washing.

First, it pays to use a good chalk with a minimum of binder in it. Strange as it may seem, the softer chalks, which dust freely, are more satisfactory from the standpoint of legibility and ease of erasure.

As to care, it would be better if no water were used in cleaning a blackboard as the small particles of lime and clay which have been imbedded in the board are affected by the use of water. But as the average teacher insists that the blackboards be washed regularly, it becomes necessary to use water for this purpose. As long as we must do this, we must use a good method.

The following procedure is suggested: Erase the board thoroughly with a clean felt eraser, removing all loose chalk. Then wash the slate surfaces with a good sponge, using the minimum amount of water for the purpose, never allowing the water to become saturated with chalk dust. (In other words, change the water often.) Dry the board thoroughly and quickly with an ordinary rubber squeegee.

It usually takes from eighteen to twenty-five years of use before slate blackboards require resurfacing. Unless a school system has at least 5000 square feet of slate to be resurfaced, it will pay to contract for this service.



This 50 year old blackboard is being restored to first youth.

A good job cannot be done without proper equipment. Several companies make portable machines to do this work. This equipment is designed especially for the job and is useful for no other work. The average cost of one of these machines is approximately \$300, to which must be added the cost of the abrasive disk and labor. Several thousand square feet of slate should pay for the cost of the machine and the material. It should be pointed out that unless there is enough surfacing to be done continuously, it would be better to contract for the work. The price per square foot varies with the quantity. A good man can resurface from 350 to 450 square feet per day on contract. The school custodian will average from 250 to 350 square feet per day. This includes staining and cleaning up.

Slate is only useful as a writing surface when the contrast between its dark surface and the chalk is definite. When, in time, this contrast has disappeared, the surface must be renewed. In the schools at Freeport, N. Y., we have a machine for doing this work and many thousand square feet of blackboard surface have been renewed, using the following procedure:

The first operation necessitates the removal of the residue that has been built up on the surface of the slate.

For this, a coarse carborundum fabric disk is used and an entire section of blackboard is gone over evenly with the disk. After this operation, the slate is rather rough but it is practically free of foreign matter.

The second operation is much like the first except that a medium grit writing disk is used, giving a smoother finish. The third operation is similar to the first two, except that a fine disk is used, giving a comparatively smooth surface. The final operation is the endeavor to restore the original velvet-like surface. This is obtained by hand-rubbing the entire surface with a special block, which can be obtained for this purpose.

The board will now be much lighter in color and will require staining. Wipe the board with either a clean eraser or a handful of cotton waste and then clean all slate dust from the chalk trough. An excellent stain can be made from the following formula:

$\frac{3}{4}$ oz. red prussiate potash
1 lb. logwood (A stronger stain is made by using twice the quantity of this ingredient.)
 $1\frac{1}{2}$ lbs. sulphate of iron
2 oz. pyroligneous acid
 $\frac{1}{2}$ lb. gum arabic
1 lb. powdered nutgalls

With the foregoing, use about 1 gallon of water. Stir it often and permit it to stand several days before using; the longer the better, as the different ingredients become thoroughly mixed.

To apply this stain, proceed as follows: Put a small quantity in a container large enough to dip in a clean new felt eraser. Apply the stain lightly and evenly in either a vertical or horizontal direction to one section of the blackboard at a time, having a quantity of cotton waste available to wipe off the excess stain before it sets. Be sure and keep the material off the woodwork and floors. The same method is applied to each section of the blackboard, the operator being careful not to cover too great an area at a time.

Shortly after the blackboard has dried, wash the entire surface with clean water. The result should be an excellent writing surface.

Painting and Lighting

IN EAST CLEVELAND, Ohio, a relighting program was started four years ago, which is intended to be complete within the next year.

The contemplation of any major expansion or change of equipment necessitates, first, a thorough and accurate survey of existing conditions. A systematic survey of our buildings was made in the following manner: Starting in October and continuing through the short and

foot candles along the interior rows of desks (with artificial light on); from 5 to 8 foot candles in the center of the room, and from 20 to 50 foot candles on the desks near windows.

Examination of the fixtures, the majority of which were of the enclosed type, showed a miscellaneous assortment of lamps varying from 75 to 200 watts. Being unable immediately to rewire or to replace any of the fixtures, the situation was im-

proved by the installation of 200 watt bulbs in all outside rows of fixtures and 300 watt bulbs in the inner rows. There were several rooms in which various types of fixtures were used in which the 300 watt lamps could be placed in the outer row and 500 watt lamps in the inner row.

The next step involved the installation of three-gang switches in every classroom, one switch controlling the inner row of lights; one, the outer row, and one, the smaller cloakroom light. This installation gave the teacher the opportunity to regulate the lighting, as the outer rows are not needed except on very dark days. It is surprising to note the current saving possible with the use of the three-gang switches.

Thus ended the first year of the program. The lighting in all of the rooms, if not adequate, was now uni-



Above: Shaw High School library, East Cleveland, is lighted by 500 watt silver-mirrored x-ray reflects that produce 24 foot candles. The white ceiling reflects 80 per cent more light.

dark days of the school year, foot candle readings were taken in every room of each building. These readings were made only on dark and cloudy days so as to get the data under the worst possible conditions. Since there are no night classes, night readings were unnecessary. A free-hand sketch of each room was made on 5 by 8 inch sheets of paper, showing room dimensions, rows of seats, teacher's desk, windows, blackboards, bulletin boards and location of electrical fixtures.

The survey showed from 2 to 3



Below: Typical high school study hall has fifteen 500 watt silver bowl units that provide 24 foot candles of light. Even the modern lighting fixtures would be ineffective if the walls had not been redecorated in pastels that reflect 50 per cent more light.

the Schoolroom

W. M. COUNCELL

Business Manager, East Cleveland, Ohio

form and measurably improved and could be economically and intelligently controlled. Former meter readings of from 2 to 5 foot candles had improved to 7 and 9 foot candles; not enough yet, but surely a decided and inexpensive improvement.

A minimum of 20 foot candles was selected as the objective. To produce a minimum of 20 foot candles of artificial illumination, the following program of rewiring, relighting and redecorating was planned. This program has been followed for the last two years as rapidly as finances and W.P.A. aid would permit.

Freshly painted and cleaned walls and ceilings are integral parts of any lighting program. The most efficient and modern fixtures become ineffective in dirty or improperly painted rooms. The redecorating program in

East Cleveland has been fully as interesting as the relighting of the classrooms. It was decided to use the pastel tints of gray, green, tan and blue of suitable light reflection, now recommended by illuminating engineers. Scientific and intelligent use of classroom colors of any kind requires careful selection regarding their light reflecting properties, the theory being that ceilings should reflect 80 per cent or more light and

sidewalls, from 50 to 60 per cent. Side-wall colors under 50 per cent are too heavy and tend to darken the room, those over 60 per cent are too light.

Before starting to paint the buildings, a dozen or more well-known and reputable paint manufacturers were invited to submit samples of their pastel grays, greens, tans and blues on panels about 12 by 12 inches, all paint to be dead flats. Whites for ceilings were also submitted. These

Below: Surveying classroom lighting by taking foot candle readings. Since the majority of the fixtures were of the enclosed globe type, shown here, the situation was first improved by installation of high watt bulbs until fixtures were replaced.



Above: This kindergarten room has six indirect 500 watt plastic units. The only maintenance operation necessary for indirect fixtures is wiping out the bowl with a damp cloth once a month.



panels were numbered for identification purposes and tested for their factor of light reflection. All acceptable wall colors were to show a factor of reflection of from 50 to 60 per cent, and white ceilings, a factor of 80 per cent or more. Eighty-four colors and 10 whites were thus tested, 40 of the colored panels passing within the 50 to 60 per cent light bracket and 8 whites testing 80 per cent.

An average classroom in one of the buildings was then selected and the wall space divided into 40 vertical strips 2 feet wide. Each strip was given two coats of one of the selected

wall colors, thus completely covering the walls of the room from the ceiling down to the dado with the colored panels. With a reflectometer, tests were applied to the 40 new and clean colors on the walls. Thirty still held within the approved bracket and from these 30 colors, nine of the most pleasing were selected for the first building. This room attracted so much attention that we left it striped for several weeks until the building was virtually redecorated.

The completed classrooms have ceilings finished in a dead flat white, and sidewalls in one of the carefully selected flat pastels; dados in darker but harmonious shades are semigloss. The corridors are in two-tone color combinations and, since seeing is not paramount in the corridors, use is made of semigloss paints which are considered to be more practical and tend to brighten these areas. Different color combinations may be used for different floors or wings of the larger buildings.

The same color selecting process was repeated when the next building was started, except that a different group of paint companies was asked to submit samples. We now have about 40 approved tints of the four pastel colors to select from and do not contemplate additional color tests for our other buildings. Colors are all assigned to rooms according to their size, outside exposure, distance from other buildings and trees. Some rooms require cool shades; others are so situated that warm tones give better results.

Complete Rewiring Necessary

The installation of adequate and modern lighting in any old building necessitates a complete rewiring of the structure. In some of the older buildings this meant new and larger conduits and extensive channeling of plaster and respacing of ceiling outlets for proper distribution. Emphasis should be placed upon the absolute necessity of laying the proper ground work from the transformer vault clear to the tip of every bulb. Otherwise the money will be thrown out of the window. For us it meant: (1) larger transformers and a new transformer vault; (2) new and heavier feeder lines; (3) new panel boxes on every floor, and No. 10 or 12 wire

pulled into every room. We did not use any No. 14 wire at all. This looked like a tremendous task at first, but with the aid of W.P.A. labor, both skilled and unskilled, our two electricians and the local power and light company, the work was accomplished with surprising precision and speed, even while school was in session. The plasterers followed the electricians and behind them came the wall washers and painters.

With reference to the lighting units employed for the relighting of the buildings, only the totally indirect type is being used for all classrooms, as we believe it is best suited for our conditions. This is not meant to infer that this type is the only fixture that will give satisfactory results. Totally indirect units give a soft and diffused light and better distribution than some other types. The units all have an efficiency rating of 75 per cent or more. They are spaced from 9 to 13 foot centers, depending upon ceiling heights and size of rooms.

Seventeen Designs Approved

In each elementary school the same type of fixture is being installed in every room, but different fixtures in different buildings, since the uniformity and size of our elementary schools permit of uniform fixtures throughout each building. Our high school, on the other hand, is a large rambling structure with varying floor levels and numerous wings; here there have been installed various designs of indirect fixtures made by various manufacturers. As a matter of fact, 17 designs of efficient and approved types of indirect fixtures are being used. We have not relighted any of the corridors, lunchrooms or the auditorium, nor do we plan to do so. It is our belief that such rooms in any school are already adequately lighted for the designed purpose, unless overcrowding has forced the use of such rooms for study hall purposes. Once a month our custodians wipe out the fixture bowl with a damp cloth. This is the only maintenance operation necessary to ensure efficient operation.

Considerable interest is being manifested in the use of photoelectric control for schoolroom lighting. We have had a few in service during the last three years and find

that they are a decided asset in the proper lighting equipment for classrooms. Automatic control of the outer row assures the necessary illumination when natural light is insufficient because of weather conditions, and cuts off the current when ample outside natural light is available.

Provides Automatic Control

At present individual automatic control is being installed on the outer row of lights in each of the 22 classrooms in one of our elementary schools. However, the rooms are being wired so that controls for the inner rows of lights may be installed at any future date if it should appear from further studies that such installation and operation are essential.

Most problems in artificial school lighting are so closely allied with those of natural lighting that it becomes necessary to dwell briefly on the subject of window shades. All of our old shades are being replaced with double hung shades made of translucent cloth. This material lets some light pass through into the classroom but not enough to cause glare and uncomfortable brightness. Dark, dirty and shabby looking window shades detract from the appearance and lighting performance of any classroom. Shades should never be pulled down, even half way, unless the sun is actually shining on the pupils' desks. Our teachers have definite instructions on this subject, for partially drawn shades shut out light that is both free and more desirable than the best artificial light we can supply to date.

In the traditional school, the front edge of each desk is at right angles to the window wall, thus bringing the window light within the field of vision of the children, *i.e.* ahead of the shoulder line. To remedy this situation more desks should be at the correct angle to put the window at their shoulder line or behind it. This arrangement is not, of course, for cross-lighted rooms.

Our entire program has been financed from our operating funds, with the federal aid previously mentioned. In 1938 our total expenditures for electrical consumption (both power and light) amounted to 1.5 per cent of our operating budget.

Starting Right With Floors

LEE LEDBETTER

Board of Education
Oklahoma City, Okla.

FLOOR maintenance is one of the important problems of the school custodian, requiring scientific methods that will both clean and preserve the surface.

It may be of interest to describe the method used in Oklahoma City in treating sealed and waxed floors. After a new wood floor has been well laid and properly sanded, it is ready to be treated. Before applying the first coat of seal, it is well to check for sander marks. These marks may not be noticeable before treating but they will show after the seal is applied and cause the floor to darken and wear unevenly. Apply the first coat with a sheepskin applicator.



Linoleum, maple and rubber tile — three popular types of floors for kindergarten, gymnasium and corridors, respectively.

It should be applied across the grain of the wood and then smoothed lengthwise of the floor. Allow it to dry at least twenty-four hours. This first coat of seal should then be buffed with an electric floor machine and with steel wool. Buffing will remove all rough places on the floor and will harden the seal, causing it to wear much longer. Sweep the floor thoroughly to remove all particles of steel wool.

The floor is now ready for the next application of seal, to be applied in the same manner as the first coat and followed by the buffing machine. If necessary, a third coat may be applied in the same way. The last coat should be buffed lightly. Allow the floor to dry from thirty-six to forty-eight hours. The floor is now ready to be waxed. A liquid self-polishing wax is easy to apply and works satisfactorily on sealed classroom floors. The wax may be applied by using a sheepskin applicator or a cotton mop. If the best results are to be obtained, a good grade of wax must be used. The floor is ready for use in thirty or forty minutes after the wax is applied. All sealed floors, except gymnasium floors, should be waxed in order to avoid wearing of the seal.

Linoleum Maintenance

Linoleum is a combination of ground cork and linseed oil pressed on a burlap foundation. Care should be used in cleaning linoleum floors, for any cleaning agent that robs the linoleum of its linseed oil causes it to deteriorate and crack. Linoleum should be scrubbed with water and a neutral soap, then thoroughly rinsed with clean water. Never varnish or seal a linoleum floor as varnish is unsuited to the flexible character of linoleum. It is impossible to varnish over new battleship linoleum as it has been given a coat of wax before leaving the factory. Varnish will not dry over wax. By all means keep linoleum waxed, for waxing prolongs its life. Do not use an excess of wax. Only a thin coat should be applied. Liquid wax can be diluted by using water. Dampened sawdust will work nicely in sweeping the floor. Oily floor sweep should not be used on linoleum.

Special care is required in maintaining terrazzo floors. Before a new

terrazzo floor is treated, it should be properly honed and cleaned. To clean a terrazzo floor a mild solution of warm water and a neutral soap should be used. This cleaning requires two men in order to prevent the scrubbing solution from drying on the floor. The second man should use a clean rinse mop to pick up the loosened dirt and water. After the floor is thoroughly scrubbed and rinsed it is ready to be treated with a good liquid wax or terrazzo seal. Either a buffing or self-polishing wax may be used. Never use oily floor sweep on terrazzo floors as oil is penetrating and will eventually darken these floors. Dampened sawdust also works nicely on terrazzo floors.

We may now consider oil treatment for new floors, pine or hardwood. First, the floors should be treated with linseed oil and pure turpentine. Use a solution of 1 part linseed oil to 3 parts turpentine. This may be applied with a cotton mop. It should be rubbed into the floor and any excess oil should be wiped off. Allow the first treatment to dry at least twenty-four hours. Follow with a second application. Any excess oil should be wiped off. Allow the floor to dry thoroughly before it is used. These new floors should be thoroughly seasoned before beginning oil cleaning.

After floors have been sealed with linseed oil and turpentine they should be swept carefully. A solution of 1 quart of turpentine to 1 gallon of good floor oil can be used for oil cleaning. Mop-scrub the floors with this solution, follow with a dry mop that will pick up all surplus oil and dirt and that will have a polishing effect on the floor. If an old floor has been over-oiled, this method of oil cleaning will remove the accumulation of dirt and excess oil. The turpentine used in this cleaning solution cleans, hardens and bleaches the floor, thus preventing further dirt or dust from entering the pores of the floor. Water should never be used on a floor that is maintained by oil cleaning, as soap and water will have a tendency to darken oil treated floors.

For new floors in the kindergarten, office, library and cafeteria use two applications of 3 parts of turpentine

and 1 part of linseed oil; dry thoroughly and then wax with either self-polishing or buffing wax. This will make a satisfactory finish, especially for those floors that receive hard wear. These floors are easy to maintain and can be easily cleaned with a fifty-fifty solution of 12 per cent carnauba water wax.

In using this treatment on old oiled floors, they must be made clean and uniform in appearance before the linseed oil and turpentine are applied. Any dirt or discoloration on the floor will be left sealed into the wood, for linseed oil is a sealer and not a cleaner. Before sealing, the floor should be sanded, or the following cleaning method used: Scrub with a solution of neutral soap and water, then rinse immediately. It may be well to add a small amount of vinegar to the rinse water. This will act as a neutralizer and a bleach. Windows should be opened to allow the floors to dry thoroughly. The floors are now ready to be sealed with linseed oil and turpentine.

Painting Supervision

When school painting jobs are let out under contract, the specifications should include: (1) date of start and finish; (2) location and surfaces to be refinished; (3) number of coats, colors, textures and patterns; (4) character of finish, such as gloss, flat, semi-flat, smooth, stippled, glazed, enamel, calcimine, wall paper or wall fabric; (5) brands of materials with manufacturer's name; (6) character and extent of surface preparation, and (7) colors to be used. Color samples should be submitted for approval in advance.

There are many opportunities for carelessness and poor work, according to *Buildings and Building Management*. The most common evasions are: skimping of the preparatory coat, omission of specified coats, and substitution of materials cheaper than those specified.

The National Association of Building Owners and Managers, Chicago, has for sale a good specifications manual developed by a large management organization. The writing of specifications is difficult and they must be revised as new products or changed conditions require.

Old Desks Rejuvenated

CHESTER F. HAYFORD

Board of Education, Fessenden, N. D.

IN JUNE 1938, it was decided to build a new school building in Fessenden, N. D. The desks and other furniture were not in good condition and it seemed impossible to buy new equipment. It was then determined to refinish desks by the best and cheapest method.

We perfected a system of handling the entire job at a minimum expense. The actual work is given step by step.

Following is a list of the tools used:

- 1 floor scraper with curved blade
- 1 floor scraper with straight blade
- 1 corrugated-bottom plane
- 1 motor with 8 inch sanding disk used for sharpening scraper blades. (This is faster and keeps the edge straighter and sharper than can be done with a file.)
- 2 sanders, one disk sander and one belt sander
- One 28 pound tailor's iron (used as a weight on backs while sanding edges)
- 2 furniture clamps
- 1 automatic screw driver
- Hammer and wrecking bar for taking desks apart
- 1 small electric drill
- 1 electric fan to blow dust away from sander operator
- 2 varnish brushes
- One 6 foot rule for spacing desks
- Cleaning equipment for cleaning before finishing

Plane all cuts out of the edges of seat, back and desk top. Scrape the desk top, using the scraper with the straight blade with the grain of the wood. Then scrape the seats, using the curved blade for the inside curve and the straight blade for the outside curve and edges.

At our school we did not use a varnish remover because the time spent putting it on could better be utilized in scraping the desk dry, as the desk must be scraped even if remover is used.

The back can then be removed. On some desks the top must be removed before the back will come off. Be sure all screws are out before

removing the back. Take all the backs to a table or bench with stops of some kind to hold the back in place while scraping and sanding. The backs are scraped in the same manner as the seats. Sand the backs first with No. 3 abrasive on the machine.

The rear side of the seat back need be sanded only where exposed on the sides and top, or dashboard, as we call it. Beginning at the front of a row, sand the seat and top, then remove the desks from the floor as the seats and tops are sanded. This not only gets the desk out of the way but makes it possible to turn it to the light for the fine sanding and finishing.

As the coarse sanding is finished fill all cuts or holes too deep to plane out with plastic wood, first drilling small holes at an angle on the inside edge of the holes or cuts to hold the plastic wood in place. Plastic wood shrinks, so pile it up. Also, glue and clamp any broken parts. This should be done every evening. It is best to leave the plastic wood about two days before sanding with the No. 1/2 or No. 0 paper, which is the next process.

The edges are sanded at this time. Any sharp corners made when planing cuts out of the edges can be

rounded by following around the corner with the sander. After sanding with No. 1/2 or No. 0 abrasive, go over everything by hand with No. 00 sandpaper, using a piece of No. 1/2 or No. 0 abrasive to smooth corners, edges and any rough spots left by the machine. Hand sanding also should be done with the grain.

To clean the desks and room thoroughly before finishing is important. After everything is clean, go over the desks again with a dry cloth and while finishing use a dry paint brush to dust again as this removes any lint left by the cloth.

For the first finishing coat a penetrating seal, colored with 1/8 part oil walnut stain, was used. It was stroked across the grain and both ways diagonally, then finished in long strokes with the grain. The second coat was a gymnasium finish seal (clear) that was applied in the same way and sandpapered between coats and after the last coat with No. 00 sandpaper. The penetrating seal brought out the beauty of the wood. The seal must mix with stain. The manufacturers can give this information.

Proper spacing and arranging of the desks that are to be fastened down add greatly to the appearance of the finished job. Put all desks of one make together because there is enough difference between various makes to make a bad appearance, even if the sizes are the same. In spacing, measure from back to back and from both sides to get the desk square. The proper spacing is shown in most school supply catalogs. The seat and desk measured must be ones that are not planed down too much and that are of the same type as listed in the catalog, as there is a difference in the width of desk tops.

The aisles can be made to suit the room. We run a string the length of the row to get it straight and measure from the wall to start placing the first row.

There were funds for a new building but none left for new desks. Therefore, it was up to the maintenance department to make the old desks look like new. The steps taken are given here as a suggestion for summer work in refinishing school desks

Care of School Grounds



PETER J. O'BRIEN

Secretary, Department of Education
New Rochelle, N. Y.

"**M**AINTENANCE and upkeep of school grounds" usually occupies an inconspicuous position on programs of maintenance, plant inspection lists and check lists for summer work. A program that attempts to conserve and enhance the attractiveness of the school grounds and to promote the fullest use of available play spaces for educational and recreational ends deserves more consideration.

The educational value of well-kept lawns, trees and shrubbery and their contribution to the development of habits and attitudes of good citizenship are generally conceded. Beauty and orderliness encourage appreciation of and respect for public property. A well-landscaped school building is, moreover, a source of pride to citizens and a significant factor in the development and improvement of the locality.

New Rochelle, a highly residential suburb of New York City, is fortunate in the possession of many landscaped school properties designed to harmonize with surrounding sections.

The area of school grounds, exclusive of buildings, is approximately 56 acres, including lawns and planting, play fields, walks and driveways. The school playgrounds are available

to the City Bureau of Recreation program after school hours, on Saturdays and during vacations.

Much of the work involved in maintaining and improving these grounds must be done in appropriate season, prior to and after the summer vacation.

Some of the regular items of maintenance of school grounds performed during the summer months at the 14 school buildings in New Rochelle may be listed as follows: upkeep of lawns, shrubs and trees; repair of walks, driveways and curbs; inspection and cleaning out of catch-basins and drains; correction of faulty or inadequate drainage; grading, repairs and improvements; painting and repair of playground equipment; painting of flagpoles and inspection and repair of their bases, and lining and marking fields and playgrounds.

The obvious work involved in each of these operations is common to all grounds. Unusual size, conditions and circumstances warrant somewhat more detailed mention of the work at the senior high school and Isaac E. Young Junior High School.

The senior high school grounds comprise an area of approximately 10 acres including girls' play field, athletic field, cinder running track

and three tennis courts. Keeping turf on the athletic field is one of the most difficult tasks in our grounds maintenance program. At the end of the football season the turf is ruined and nothing can be done to bring it back until the following spring. Then, because of the unusually heavy field activities, it is impossible to do a thorough job of reseeding or resodding without seriously interfering with the use of the grounds. This work is necessarily postponed until the summer vacation, when weather conditions are unfavorable for establishing turf; this handicap, however, is partly overcome by generous fertilization and constant watering.

For several years the high school commencement exercises have been held on the athletic field, necessitating the erection, removal and storage of a temporary platform. Temporary bleachers accommodating 2000 persons must be taken down, painted, repaired and stored until the football season. Permanent stands accommodating 6000 persons are inspected, painted and repaired as necessary. The cinder running track, which requires considerable care in the spring, is raked and rolled and made ready for use in the fall, and border planks are repaired or replaced as necessary.

Three clay tennis courts are in service from early spring until late fall and require daily sweeping and rolling. Lead tapes used for lining the courts receive extra coats of white paint during the summer as needed. Calcium chloride is spread as necessary to keep the courts dust-free. This compound is also used on our sand and clay surfaced playgrounds to lay the dust in late spring or early summer, and is repeated as required.

Grounds around the Isaac E. Young Junior High School also comprise approximately 10 acres. The play

fields, with the exception of two baseball diamonds, have turf surfaces. Because of the contour of these grounds, there are many steep banks and the difficulty in keeping the slopes green and the grass cut adds to the summer work. The three tennis courts on these grounds which, incidentally, were constructed by our own maintenance staff, receive the same summer care as do the courts at the senior high school.

Grass cuttings, leaves, sod trimmings and hedge cuttings, when raked from all grounds, are trucked to a decomposing bed located at the rear of this school and are used the following year in planting nursery stock of all kinds. An average of 150 yards per year of this compost material is made.

Except portions of five playgrounds that are surfaced with blacktop and a small cement area, the other playgrounds have sand and clay surfaces. Painting of lines for various games on blacktop and cement areas is practically all the attention these surfaces require. Sand and clay surfaces require persistent care in keeping them properly drained, smooth, safe and dust-free.

In addition to maintaining the grounds many capital improvements to grading and drainage are made during the summer vacation. Last year the removal of outcrop rock on one of the playgrounds and grading it level eliminated an eyesore and substantially increased the play area. The rock removed was later used in rebuilding a retaining wall for another playground. Extensive digging of trenches on one play field to replace drain pipes of insufficient capacity on the grounds and in the building corrected a flood condition in the boiler room that recurred after every severe rain.

Under the direction of the supervisor of buildings and grounds, all of the work outlined, with the exception of extensive sidewalk replacement, is done by the school system's staff of ground men in charge of a foreman gardener, who is a graduate horticulturist and a competent surveyor and draftsman. This staff is employed steadily and is kept busy the year round with these and many other tasks. An average of eight men are employed on the maintenance

and improvement of grounds alone.

Fencing and gates on all grounds are inspected and repaired and painted as necessary, and it is a rare summer that additional fencing is not required for some new area.

Building exteriors, too, have their important place in the summer maintenance program. As in the case of ground work, constant inspection and immediate attention to emergent and minor faults pay worth-while dividends. This procedure minimizes the volume of work to be done in the summer months reserving for that period those jobs which, because of noise or other interference with

SUMMER MAINTENANCE OF GROUNDS

1. Upkeep of lawns, shrubs and trees.
 2. Repair of walks, driveways and curbs.
 3. Inspection and clearing out of catch-basins and drains.
 4. Correction of faulty and inadequate drainage.
 5. Grading repairs and improvements.
 6. Painting and repair of playground equipment.
 7. Painting of flagpoles and repair of their bases.
 8. Lining and marking fields and playgrounds.
-

school activities, cannot be done while classes are in session.

These include extensive repairs, when necessary, to roofs, walks and steps; waterproofing; pointing brick and stonework, and painting and repairs to fire escapes, doors and window trim.

It is not to be inferred that all this work is required yearly at all schools. A forward-looking program of maintenance can do much to control the normal annual needs and expense, thus avoiding peaks and valleys. The goal in New Rochelle is a consistent and adequate program that will as nearly as possible maintain the original state of repair and permit necessary and desirable expansion and improvement. Financial support of this policy is not lacking. Board mandate is found in the by-laws.

Ready for Renovation

(Continued from page 35)

operation of the local utility company) and any defective gas cocks renewed. Sewing machines and any power sewing equipment should be repaired and reconditioned as needed. When a qualified man is available, gymnasium mats should be resewed and patched. These items will suggest others that may well merit attention, since no attempt is made to make the list complete.

If a thorough program of heating repairs is carried on during the summer little difficulty should be experienced throughout the heating season. The usual cleaning of soot from breeching, boilers and base of smoke-stack is presupposed. In addition, the engineers may be expected to clean rust from the ash pits and paint them; clean and paint ash hoists; overhaul thermostatic traps on radiators; repack valve stems on boilers, radiators and water valves; test traps and renew defective elements, and replace defective gaskets.

Other work consists of cleaning and overhauling pumps, overhauling and cleaning motors on fans and unit ventilators. Replacement of defective boiler tubes can be done by using the best of the engineers or the regular shop forces.

This list, while not complete, is suggestive of the maintenance work that may be expected of qualified engineers. Work of overhauling and repairing thermostats on heat controls may be carried on with a few especially trained men or it may be done through the service departments of the manufacturers.

Few school systems have their buildings in such condition that new improvements and modernization are not highly desirable. Any replacement of electrical wiring or fixtures, any modernization of heating or plumbing installations, for which money is available, should be planned well in advance so that all contracts may be let in time for work to begin immediately after the close of school.

A well-rounded program of summer maintenance will not only avoid present neglect but will gradually bring back to standard those conditions that are the result of neglect and obsolescence.

Summer Suggestions

E. E. ALLEN

Administrative Assistant, Grosse Pointe, Mich.

THE first step toward planning the summer cleanup involves budgetary provision for materials, labor and supervision of the program. Supervision can best come from the office of the superintendent of schools where may be set up a complete summer program based on a combination of recommended procedures from the head custodian and principals of the schools and the general knowledge of maintenance needs of the official responsible for the planning.

The difference in price between a temporary repair job and a thorough piece of maintenance is often too small to warrant a decision in favor of the former. The labor and material involved in replacing three out of five sections of roof gutter, for example, will not be much more than doing the whole job. The two "fair" pieces can be saved for a possible "rainy day" and in time the comparative cost of the two types of procedure will be close.

It is wise to make roof repairs as early as is expedient in the spring. This gives the whole summer in which to check on the adequacy of the work and minimizes the possibility of finding the roof improperly repaired when there is a foot of melting snow covering it. There are many asphalt and tar preparations on the market which the maintenance staff can easily apply and which do a permanent job of stopping leaks in flat composition roofs.

The time to rehabilitate the heating plant is between the closing of the heating season and the closing of the school year, leaving only a minimum number of odd jobs for the period after the opening of school in the fall. This procedure will enable the custodian to make full use of the school vacation period for building work and at the same time will assure the supervisor that the heating plant can be placed in operation in the fall with no delay in starting its operation.

If custodians have summer vacations (and they certainly should have) these should be scheduled immediately after the close of the school year. With his

vacation behind him the worker will face a summer job with much more enthusiasm and should be able to work through until the opening of school without any interruption in his schedule.

The furniture repair schedule will probably necessitate major repairs to only one or two pieces in most rooms. Designate one classroom in each building for this type of work, remove all pieces to be repaired from each room in the building and mark room numbers on the under sides with chalk so that the pieces may be returned to their proper places. This will keep the mess segregated and will allow cleaning to be finished in each classroom as it should be. Clean the repair room at the end of your schedule.

A room should be closed and locked after cleaning and only a thorough dusting should be necessary to place the room in proper condition for pupil occupancy just before the opening of school.

Don't turn off electric refrigerators during the summer. Such machines are made to operate continuously and the electricity necessary for summer operation will probably cost much less than fall repair bills necessitated by the attempt to save by shutting down.

Have custodians gather any gold fish bowls into one room, marking each bowl with a sticker showing the room number from which the container was taken pasted on the outside of the globe. This will not only save the custodian the trouble of making a long journey each time he goes to feed the pets but will also minimize the possibility that some poor fish will be forgotten for a whole summer.

Every summer cleaning schedule should provide for a thorough cleaning of all light fixtures. If the job cannot be done then, it most likely won't be done at any other time, and dirty light fixtures waste both the illuminating dollar and the pupils' eyes.

Save money by shutting off at least all but one of the automatic flush boxes

in the toilets at the beginning of the vacation period.

In a school system of any size, shade repairs can well be centralized in one room in one building where all of the torn window shades for the system can be brought to a person who spends his full time in making such repairs. Place a tag on each roller showing room number and keep bundles of shades from individual buildings separate.

The summer, when all plumbing fixtures can be turned off, is an ideal time for checking the water system for leaks by taking a series of meter readings. If the meter indicates that a substantial amount of water is being used when all the fixtures are closed, there is a good clue to why the annual expenditures for this item were higher than they should have been.

Don't forget flag poles, outside window sash and outside doors in preparing an estimate of the summer painting needs. Weather conditions make it necessary to check this type of painting more often than the interior type.

Many dry cleaning establishments find that summer business is slow. If there are a number of these establishments in the community, let them bid on cleaning and repairing all the draperies and curtains that may be in need of such type of care. The low figure for this type of work may be surprising.

If there is to be any experimentation with cleaning devices and cleaning preparations do so in the winter when continued use of the building will permit checking the results. Start off the summer program with a standard group of items which will see you through. No one wants to wait all summer to see whether a new brand of wax will hold up on the floors.

The members of the maintenance staff in most school systems, although good "handymen," cannot be expected to do types of repair work that involve certain technical skill and knowledge. A school system will be wise in segregating the items representing this type of work and having responsible craftsmen and mechanics in the community bid on doing these jobs.

Wellesley Selects "Modern"

EDWIN H. MINER

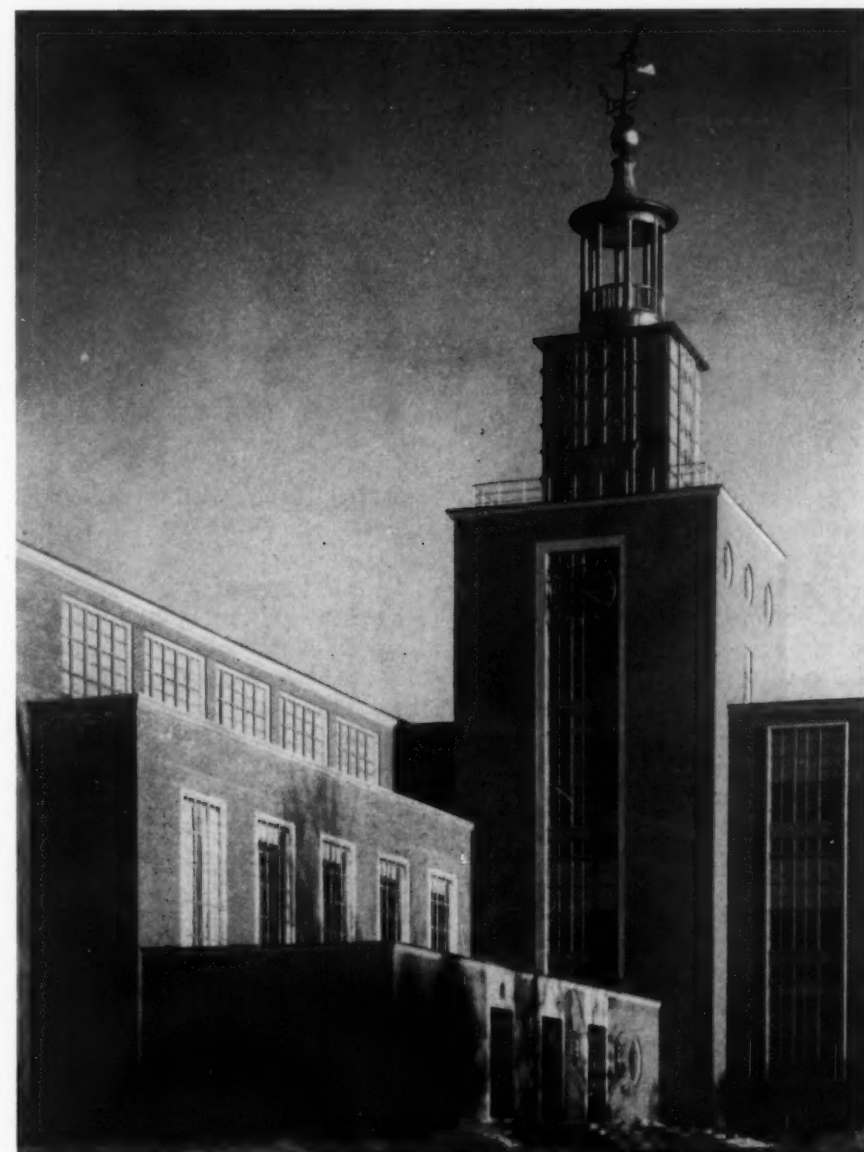
Superintendent of Schools
Wellesley, Mass.

WHEN the designers for the restoration at Williamsburg, Va., forsook the Colonial pattern and sold a high school building of modern lines to Wellesley, Mass., in traditional New England, one might well ask, "What is the reason? Was it an accident?" No, the architects, Perry, Shaw and Hepburn of Boston, were selected on the basis of sketches submitted in a competition and the finished building is, with minor alterations, the concrete embodiment of their competitive plan. Here is the story.

The lay building committee, composed of an investment adviser, two engineers, a banker and a college president, called in a school consultant and an architect to help them and the school department decide which of the submitted plans was the best. The successful plan commended itself because of its simplicity of interior arrangement; its functional design, which would permit easy and efficient use of all parts of the plant, and its obvious economy of space.

Only when the elevation was studied did the committee clearly realize that such an interior naturally dictated an exterior of equally simple lines. It was somewhat disconcerting that the plan which most nearly satisfied the educational requirements should have an exterior so plain and square. The designers insisted that a careful selection of bricks and a happy choice of trim and color would break the plain elevations into a series of interesting details. They also pointed to the setbacks on the auditorium wing and the tower as interesting elements that would add character to the general appearance.

The objection, however, of the committee and consultants alike, to windows 8 feet wide and piers only 2 feet less in width appeared insurmountable. The architects asked why windows in school buildings had to be narrow and why piers could not be more than 18 inches

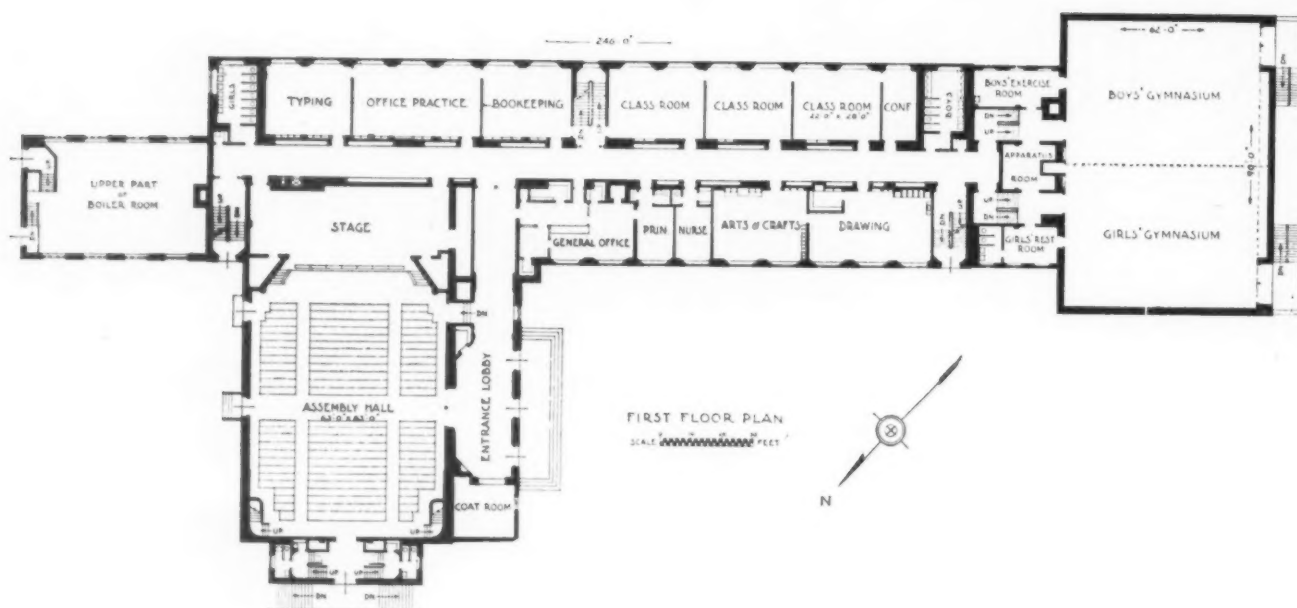


The clock tower and setbacks on the auditorium wing, combined with a careful selection of bricks and a happy choice of trim and color, add character to the general appearance and break the plain elevations.

wide. When they, in turn, were not convinced, it was decided to put the question before a research man. A physics professor of the Massachusetts Institute of Technology made a scale model of a typical classroom and carried out tests that conclusively proved that excellent illumination was possible with the windows and piers as proposed.

These findings were fortunate because the key to the simplicity and functional flexibility of the whole

plan hinged upon the placing of large, regular and small-sized room units in the spots needed for them. For example, laboratories could be placed on any floor or on either side without worrying about whether the windows and decorative exterior would interfere. All rooms could be laid off in terms of the number of window bays needed, each bay to be 14 feet wide. Regular classrooms could be two bays, or 28 feet, long. Special rooms could be any multiple



of 14 that would provide the necessary space. Examination of the floor plans will disclose the ease with which desirable orientations have been obtained for the several special rooms, such as arts and crafts and biology.

Modern lines, freedom from furbelows and attention to functional purpose carried the day, and the building committee commissioned the architects to erect the building. Construction proceeded slowly but thoroughly for more than a year. Last September the pupils reported for classes, and dedication took place in October. The finished structure draws many comments from visitors,

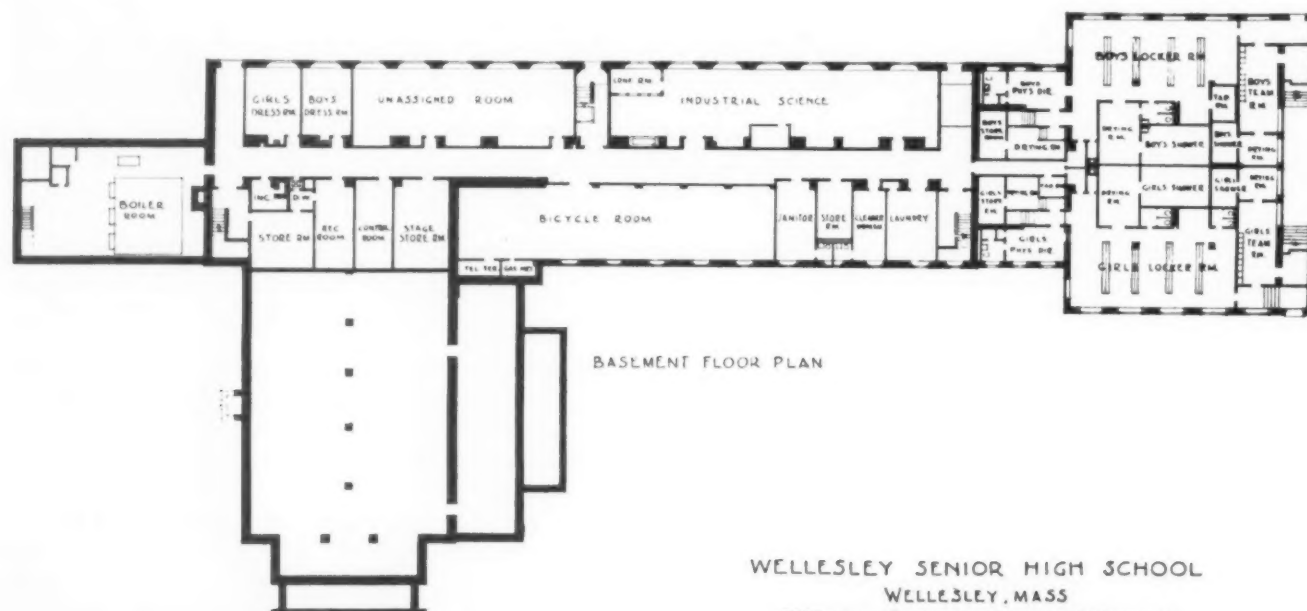
both as to the unusual characteristics of its exterior and the refinements of its interior.

Several features of the interior arrangement indicate thoughtful planning. High schools invariably want and need an auditorium. Too often the finished product is not entirely satisfactory as a theater. In planning the auditorium, four factors influenced the architects: (1) the school had developed interest in artistic and dramatic productions and needed a hall for dramatic purposes; (2) many amateur dramatic associations in the town would rent the hall; (3) it must be readily accessible to the main part of the school, although it

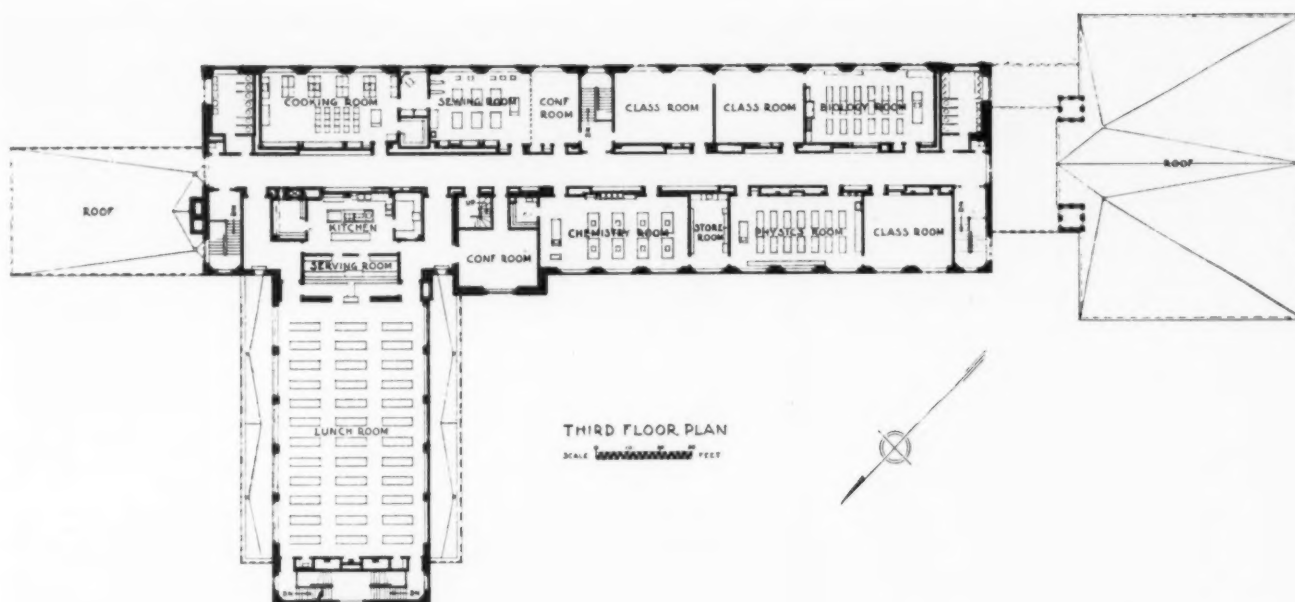
was to be isolated enough to permit occupancy without opening the entire school, and (4) the cost of this unit could not be so prohibitive that no money would be left with which to equip it.

By combining the cafeteria in the same unit, the cost was spread. By putting the stage into the space usually left dead, where an ell comes off a main building, waste space was avoided and stage and lobby alike became closely connected with the main school corridor.

The second factor lent emphasis to the school's desire for a first floor hall and it was so placed. The first factor led to the planning of a hall



WELLESLEY SENIOR HIGH SCHOOL
WELLESLEY, MASS
PERRY, SHAW, & HEPBURN - ARCHITECTS - BOSTON, MASS



large enough (800 seats) to care for the entire student body. The floor was pitched and the proportions and acoustics were carefully considered. The finished hall is a delight to the eye and a treat to the ear.

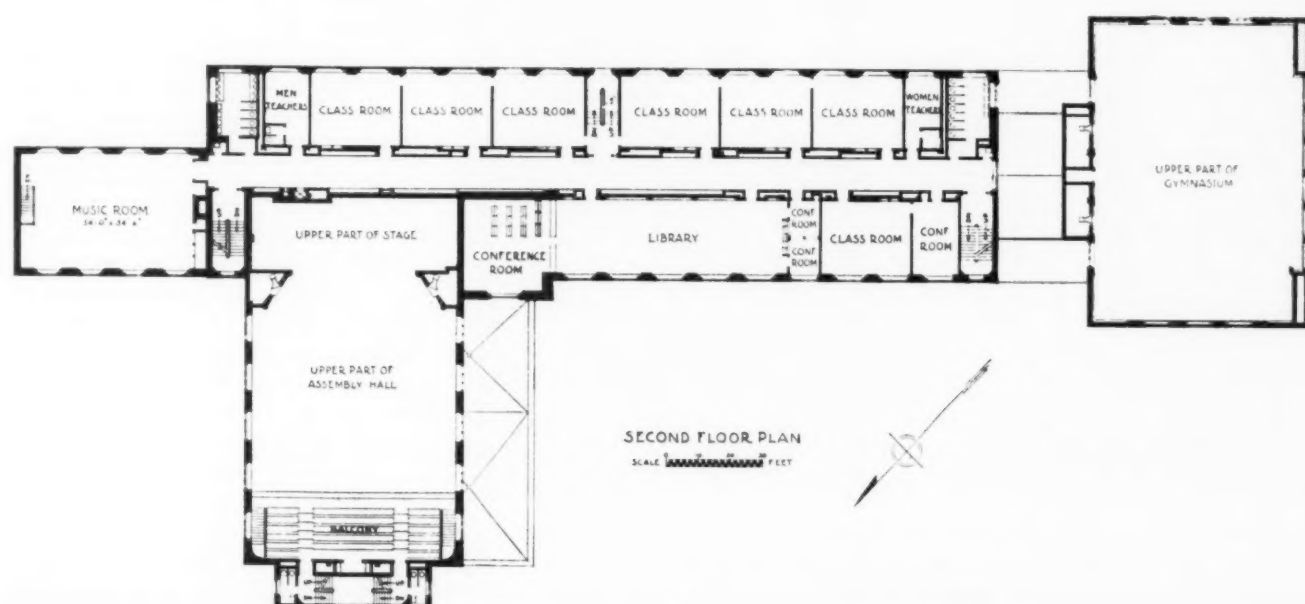
The stage received special attention. It is deep enough and the proscenium arch is sufficiently wide to permit choral as well as dramatic presentations. All the aids of modern stagecraft and the help of an expert in stage equipment have overcome the lack of a penthouse and fly room overhead. The installation of excellent rigging and complete switchboard control permits the presentation of first-rate dramatics.

A second interesting feature is the boiler room wing. In height it matches the gymnasium section on the other end. Besides caring for the heating units, it provides an excellent airy room for the music classes of the school. This isolation of a school unit, which by nature of its normal function is likely to be a disturbance, is desirable. It is through this wing that corridor connections could be made to a future extension of the plant.

A third feature is the location of the cafeteria on the third floor. Instead of the usual complaint from visitors about the permeating smell of soup all through the building, the

department now hears, "What a delightful lunchroom! Why, it is a roof garden!" Its 10 windows, each 12 feet wide, literally open this room to the unobstructed rays of the sun, for the building sets well back in a 40 acre tract of park land.

The gymnasium wing houses a double playing floor, which can be used as a league game basketball floor or as two separate working gyms, divided by a large sectional sliding door. Recessed bleachers of the telescopic variety are set into the wall on one side of the floor. In closed positions they present an almost unbroken surface to match the maple wainscoting of matched floor-





Above: The auditorium is large enough (800 seats) to accommodate the entire student body; the stage is deep enough and the proscenium arch sufficiently wide to permit choral as well as dramatic presentations from school and town.

ing that girds the entire room. An electric scoreboard is mounted on the wall facing the bleachers.

On the ground floor beneath the playing floors are two large airy locker and shower rooms. There

also are two visiting team rooms and physical instructors' offices. A generous use of glass brick in partitions has extended the natural light into all parts of the rooms. This gymnasium unit can be used without open-

ing the rest of the plant to visitors.

Although this building was built with the aid of a P.W.A. grant, it was equipped entirely by town funds. The superintendent of schools prepared the equipment specifications, checked all bids and supervised all the details of installation. This procedure not only saved the usual commission fee but also permitted the school department to have the type of equipment it needed and wanted in the school, without an intermediary. Teachers' desks and library and conference tables are all of grade A construction. The chairs and laboratory tables are all of first-class construction and all especially designed for this building. The specifications included not only completely detailed descriptions of all items but many drawings as well.

It is interesting to note that the complete equipment, which included auditorium, stage and cafeteria equipment as well, cost only 7 per cent of the building total. The equipment was, with the exception of a few miscellaneous items, purchased from one general equipment contractor. This procedure proved to be highly satisfactory and cut down materially on the number of



Above: Generous use of glass brick in partitions extends natural light into all parts of the building. All ceilings in corridors were acoustically treated by tiles cemented directly to the under side of the floor slabs.

persons responsible for satisfying the terms of the specifications. Less than \$1500 worth of old equipment was transferred to this building.

Throughout the building color plays an important part. Modern patterns in linoleum, warm reds and browns, trim the corridors. The auditorium is resplendent in reds, gold, buffs, aluminum and slate. Gay blues and salmon decorate the cafeteria. Even the large swing-chair cafeteria tables have blue linoleum tops. The classrooms are done in the recommended shades of green, which are designed to give greatest efficiency with both artificial and natural illumination. The music room, library and offices are painted in soft shades of eucalyptus green. The building is completely equipped with a central address and sound system. There are no inter-room telephones. Use of the address system, it was felt, would make them unnecessary.

All ceilings in corridors, regular and special classrooms, the cafeteria and auditorium were acoustically treated by tiles cemented directly to the under side of the concrete floor slabs. The resultant quiet and lack of reverberations contribute to the educational efficiency of the plant.

All classroom lighting fixtures are of the open top, semi-indirect type with plastic basins. They are easily relamped and cleaned. The illumination from these fixtures is ample, even and free from glare and shadow.

A 12 acre site on which the building sits has been graded to enhance the natural beauty of its two brooks. Parking space for 250 cars also has been provided. A system of drive-ways connects all service and entry-ways. Eventually the remainder of the 40 acre tract will be developed and landscaped.

So it is that Wellesley has a school, fire resistant throughout, except for the trim and wing decks, beautifully situated and splendidly equipped at a total estimated cost of \$850,000. The unit cost of the building was 45 cents per cubic foot. This cost also included about \$45,000 of extra foundation costs, owing to the necessity of carrying the weight of the building on concrete piles extending down to a firm bearing ground.



Detailed List of Rooms

Regular Teaching Rooms (28)

- 17 standard classrooms, 22 by 28 feet
- 4 conference rooms, 22 by 14 feet
- 6 laboratories, 22 by 42 feet
- 1 practical arts shop

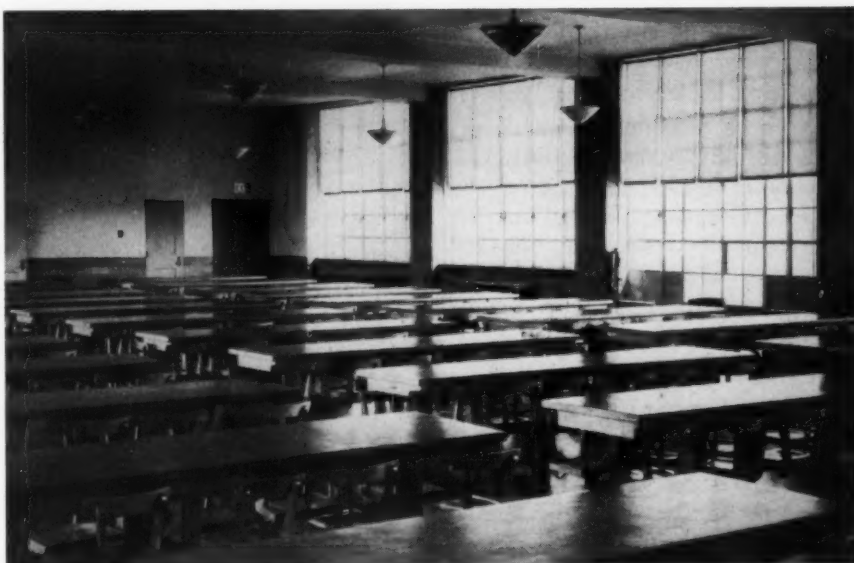
Service Rooms (21)

- 2 teachers' rooms
- 1 general office
- 4 private offices
- 1 bicycle room
- 1 science apparatus room
- 1 laundry
- 1 kitchen
- 1 serving room
- 4 storerooms
- 1 boiler room
- 2 janitors' rooms

2 clothes drying rooms

Special Rooms for Pupil Use (21)

- 1 library
- 1 music room
- 1 auditorium with balcony
- 1 auditorium stage
- 1 cafeteria, study hall
- 3 small conference rooms
- 2 gymnasiums, convertible into one
- 1 apparatus room
- 1 special exercise room
- 1 girls' rest room
- 2 locker and shower rooms
- 2 visiting team rooms
- 2 stage dressing rooms
- 1 tower room
- 1 large unassigned room



Top page: Lighting fixtures used in the art room are of the open top semi-indirect type with plastic basins. Above: Ten windows, 12 feet wide, make the colorful cafeteria on the third floor a veritable roof garden.

The Job of Physical Education

JAMES EDWARD ROGERS

National Recreation Association

A CHANGING civilization is demanding a changing education which, in turn, is asking for a new physical education. The terms "physical culture" and "physical training" are passé. The end is not to build strong men or to train varsity champions.

A modern physical education program today includes five elements: (1) the building of strong, healthy bodies, (2) the development of character through sports, (3) the preparation and training in play and attitudes for leisure, (4) the training in health habits for wholesome living, and (5) educational objectives that bring about physically educated boys and girls.

The modern physical education program has five major objectives to meet the five major problems of American life today: (1) the development of bodily strength and organic vigor; (2) the development of neuromuscular skills; (3) the development of healthful habits of living; (4) education for the wise use of leisure time through wholesome recreation, and (5) the training for citizenship through character education.

These five objectives are closely related to the present problems facing this country. Physical education has a tremendous contribution to make in meeting these problems.

The mechanical machine is playing havoc with the human machine. Man is cracking under the strains and stresses of modern living, for the machine dominates both his play and work life. He must learn how to avoid physical breakdowns, mental breakdowns and nervous breakdowns.

Man No Longer Uses Muscles

This machine age is robbing children—in fact, all of us—of the use of neuromuscular skills. The machine does the work of the world. The old crafts are gone. Inventions and labor-saving devices have taken the physical fatigue out of labor. Man does not use the big muscles of

his arms and legs, which made for physical strength and nervous stability in the past. Man no longer controls his tools; the tools control him. He is a mere robot, puller of levers and a pusher of electric buttons. When man used his whole body in his work, pulling on ropes, wielding hammers and axes and pushing weights, this took care of the health of the vital organs of the body.

The only way that boys and girls can develop those neuromuscular skills once developed by their fathers in work is through physical play.

Physical education today is conceived as a prophylactic treatment for the physical, mental and nervous ills of the human machine. It is likewise viewed as a social factor for tomorrow's leisure time

Their fathers, who now sit at their work, ride in their automobiles, go to the movies and sit in big stadiums, are losing their former control and power over bodily actions. Their reactions are slowing down, and that partially explains the increase in accidents.

Diseases that did not exist thirty years ago when most adults spent more time out-of-doors, did the labor of the world, traveled four miles an hour and slept like logs after twelve hours of work, are affecting the anatomical structure and the physiologic growth of human beings, as might be expected.

It will be as important to educate for leisure tomorrow as it was to educate for labor yesterday. We have seen the rapid decrease of the work

week and the steady increase of free time. Free time is dangerous time. People do not get into trouble when they work or sleep, but the problems that vex our courts, churches and communities arise from free hours. Shall these free hours become wholesome leisure hours through recreational avocations?

Twice as Much Leisure Time

There are 168 hours in the week. Our grandfathers worked 84 hours in the week; our fathers worked 72 hours; the young men and women in our schools today will work only 30 hours. Counting their hours for sleep and meals, the boy and girl of tomorrow will have twice as much free time as they have work time. It will become necessary for them to find recreation in the out-of-doors through sports, games, hiking, gardening and nature study.

However, the greatest problems facing this country are the widespread disregard for law, racketeering and kidnapping. Good citizenship is probably more important than economic recovery. We must educate youth in habits of good citizenship, integrity, control of temper, good will, fair play, clean living and right action.

We need emphasis on sports, not for sport's sake, but for sportsmanship's sake. Just as spelling is a tool of learning for the appreciation of literature, so the basketball should be a tool of learning in the habits of clean living and fair play. Character education cannot be developed through lip service; it cannot be learned by recitations. It must be practiced in life situations. Dame Nature has given us plays, games and sports through which life situations are reproduced; in them boys and girls can be taught the fundamental rules of good sportsmanship: play the game, play fair, keep faith with yourself and your teammates and be courteous to your opponents.

Elementary School Guidance

W. E. ROSENSTENGEL and FRED B. DIXON

Superintendent and Director of Guidance
Columbia, Mo.

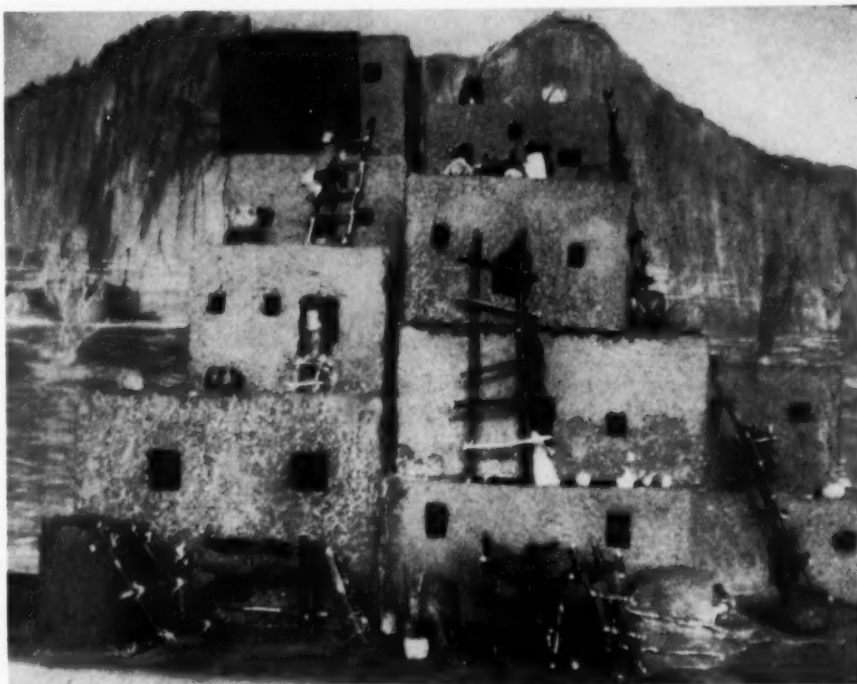
GUIDANCE is not a new term in education. Within recent years, however, school people have become convinced that we must have not only more guidance but better guidance. Along with the conviction that we must have more guidance, one finds widespread misunderstanding and divergent views as to the meaning of guidance.

Many examples could be cited to show the various interpretations now being given to guidance when one commences to define or limit this term. For example, Dr. John M. Brewer of Harvard University seems to hold that guidance is synonymous with education. On the other hand, Dr. H. D. Kitson of Teachers College, Columbia University, pleads that we drop the term "guidance" except when used after the word "vocational."

It will be the purpose of this article to give a few statements explaining what we mean by guidance, what guidance is not and the setup for guidance in the elementary schools of Columbia, Mo. It should be clearly understood that guidance is not a panacea for all the ills of this confused machine age. It is an attempt, as frequently pointed out, to help each individual make for himself intelligent choices at the time of any crisis in his life.

R. H. Price in his doctoral dissertation at Ohio State University says:

"It seems that there are several functions of guidance that are particularly pertinent to the elementary school period. At least there are functions that cannot just as well be postponed until a later period. These functions are: (1) help the child to adjust himself to the situation in which he finds himself in school and out; (2) help the pupil to develop the ability to make as intelligent choices as possible; (3) help the pupil to obtain the information necessary for the making of intelligent choices; (4) accumulate data in order that



Above: The cliff dwellers, a product of the guidance program in the elementary schools of Columbia, Mo., outlined on this page.



Above: Ready to take off for a trial "flight" in an airplane built by first grade pupils. The upper grade children in the background willingly await their turn to fly.

guidance may be more adequately given; (5) help the pupil discover himself."

The foregoing quotation gives two important facts upon which the guidance program in the elementary schools of Columbia is based. In the first place, the functions of guidance suggested by Price are the ones around which the Columbia program is organized. In the second place, Price contends that certain guidance functions should not be postponed. This point of view is also expressed by Supt. Carroll R. Reed of Minneapolis:

"In the past, it has been customary to consider guidance a function of the secondary school. In actual practice, guidance on the secondary school level is too late to help many children. They are already misfits,

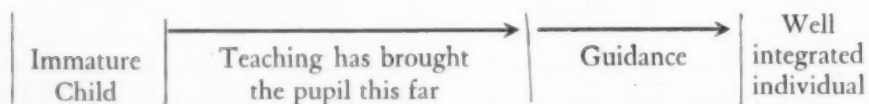


The guidance program in the Columbia schools is not organized as something separate from the regular educational program. Above: Elementary project. A guidance manual has been prepared for elementary teachers.

they are discouraged in school work and they have formed habits and attitudes that can be overcome only with the greatest difficulty."

With such a broad interpretation of guidance one might ask, "Wherein does guidance differ from teaching?" There is, first, this distinction: Teaching, as it is now carried on, is essentially a group activity, notwithstanding all the talk about individualized instruction. Then, too, teaching is primarily the passing on of a desirable body of subject matter, notwithstanding all our theories about teaching children rather than teaching facts. In some elementary schools, furthermore, the work is departmentalized. This encourages the teacher to be more of a specialist in a particular subject rather than a specialist in the all-round development of children.

Some educators contend that everything that is claimed for guidance could be achieved if we had satisfactory teaching; others say that guidance is needed. We might illustrate the point of view of the second group by the following diagram:



Whether the pupil program in the "guidance area" is called guidance or superior teaching is beside the point. The really important thing is to finish the job, to direct the activities of the immature child in such a manner as to ensure a well-integrated individual as a result of his school experiences.

There are, of course, both advantages and disadvantages in an organized program of guidance. A few of the advantages are the assurance that someone is responsible for the guidance of each child; that someone is responsible for coordinating the whole guidance program, and that someone is responsible for bringing together all the pertinent information about each pupil.

As the Columbia elementary schools are comparatively small, the guidance program must be handled by the principal and teachers in each school. This is not a handicap because the guidance program is not organized as something separate from the regular educational program.

The purpose of the guidance program in the elementary schools is to

stress the fact that guidance is a major function of the teacher in all her activities. In order to have suitable material for teachers a guidance manual for the elementary schools has been prepared. It was thought that the teaching staff would be more interested if each member helped select and prepare this material. In 1936, a 235 paged mimeographed manual was completed under the direction of the superintendent of schools, the director of guidance and the director of elementary education. Probably the best way to give some idea of the material in this manual is to quote the table of contents, which is as follows:

Chapter 1 deals with the general subject of guidance in elementary schools. Chapter 2 has to do with counseling. Chapter 3 takes up assemblies and special programs for elementary schools. Chapters 4, 5, 6 and 7 deal with courtesy, "myself and others," attitudes toward work and workers, and hobbies and leisure time activities. Chapter 8 suggests pupil programs for the guidance period. Chapter 9 suggests stories to be read during this period. The final section, chapter 10, tells what each sixth grade pupil should know about the junior high school, so that he may be partially oriented to secondary school when he enters.

The material in this guidance manual is "grade placed" and is used in the classroom and also during the opening exercise period. For the opening exercise, or guidance period, the following schedule has been used for the past year:

Monday: Teaching material in this manual (See chapters 4 to 7, inclusive).

Tuesday: Advisory period (See chapter 2 for suggested technic).

Wednesday: Pupil programs (See chapter 8 for suggestions).

Thursday: Story reading (See chapter 8 for suggestions).

Friday: Variable stories, music, hobbies.

The guidance program for the elementary schools as outlined in this article is still in the experimental stage and no definite results can be reported. Undoubtedly, some changes will need to be made but the general plan described is being continued.

Individual Differences

H. LEIGH BAKER

Simmons College, Boston

THE high rate of elimination throughout the secondary school years and the high percentage of failure in many schools and in many subjects give striking evidence that the principle of provision for individual differences is not yet sufficiently well applied in our secondary schools.

In contrast to the excessive elimination and failure in many schools and courses, the national elevenfold increase since 1890 in the proportion of boys and girls of high school age who actually attend high school has brought into the school greatly increased diversity. Differences have been magnified in abilities, interests, home and educational background and educational and vocational plans. Formerly, few adolescents who did not expect to go to college attended high school. Now, not more than one high school pupil in five attends college.

Marked specialization in the occupational and economic world emphasizes the importance of the discovery and development of significant individual differences. Not only the individual but the society of which he is a member profit by an educational program that gives desirable attention to individual differences. The rapid changes that occur in the occupational and economic world require a type of education that will develop an individual who is adaptable and versatile in the face of new conditions.

Flexibility Highly Desirable

The means by which the secondary school provides for individual differences should permeate the entire school organization and program, curricular, extracurricular, guidance, administrative and supervisory. Suitable and adequate provision should be made for those boys and girls who plan to enter college. However, high school principals and teachers should not be complacent and satisfied that the type of college preparation traditionally provided is nec-

essarily the best that can be offered. There should be an open-minded and experimental attitude and a willingness to take full advantage of whatever opportunities exist for flexibilities in preparing high school graduates for admission to the colleges.

The 80 per cent of high school boys and girls who do not go to college should not be limited to the college preparatory curriculum during which they may drop out of school because of dissatisfaction, discouragement and failure. For them there should be curriculums and subjects that provide an effective general education: social-civic, health, recreational and avocational and, to a limited extent, vocational.

What Constitutes Curriculums

Good books, and many of them, should be used but they should not constitute the curriculum. There should be many opportunities for experiences in social groups in both class and extraclass activities. Laboratories should be provided not only in science and practical arts courses but also for social studies, English, music, art, health, recreation and library activities. Desirable use should be made of field trips and excursions, films, the radio and exhibit and display materials. Other curricular materials and activities that are effective should not be displaced by new materials and activities but should be supplemented by them. The new materials should be held to account to produce results in terms of the desired educational objectives.

Suitable curriculums should be provided for those pupils who may enter business, clerical and practical arts occupations. However, there should be a suitable balance between the type of training and the number of boys and girls to whom it is offered, and the type and number of employment opportunities available to those who leave or are graduated from school. If the high school is to

serve the needs of individual pupils, there must be follow-up surveys of the activities and occupations of former pupils and graduates. Offering such vocational training as bookkeeping or stenography to many times the number who will ever have opportunities for jobs in such work, as is done now in many communities, will not be tolerated in the high school that applies intelligently and effectively the principle of suitable provision for individual differences. For most high school boys and girls their education should be prevocational and general in nature, rather than vocational. This is in consideration of a longer period of education than has heretofore been necessary and of the number and type of employment opportunities that are available to high school graduates in business organizations.

The increased number and variety of opportunities made available to the individual pupil in the curricular and extraclass fields may result in confusing him hopelessly. He must be assisted in choosing wisely to serve his individual abilities, interests and ends.

Teachers Must Be Thorough

Therefore, an effective guidance program is necessary. Homeroom teachers must do more than check attendance and keep records. They must know each pupil as an individual, his abilities, limitations, background and probable future activities. They must have sufficient association with him during the week to know him intimately. They should continue the homeroom relationship with the pupil during his period of high school attendance in order to provide sufficient opportunity to make effective use of this desirable teacher-pupil relationship.

Guidance activities of the homeroom teachers should be supplemented by the contribution of a guidance committee or council of

teachers, supported by functional personnel records and under the leadership of the principal. In the large high school, certain teachers of desirable personal qualifications and training will be assigned counseling duties, for which they will be relieved of part of the full program of classroom teaching.

Administration in conduct and behavior situations should be tempered by the principle of individual differences. "An eye for an eye and a tooth for a tooth" or a rigid system of demerit marks violates this principle. Punishment, to be effective in contributing to the growth in the social behavior of the individual, must be recognized by the offender as growing out of the situation and the offense. Behavior must be seen as socially undesirable before the pupil will wish to modify his actions. Discussion by pupils in homeroom groups of desirable standards of behavior is helpful in influencing a pupil by the weight of judgment of others of his own age. The administration of the care of property of both pupil and school by a school council and proctors can not only prove effective in safeguarding property rights, but can also prove one of the most effective means of citizenship education.

Provision of such an educational program as described can be made only when the high school principal has intimate personal knowledge of his teachers, their abilities, limitations, training, experience and special interests and hobbies. Only then can the principal assign to a teacher those duties for which she is peculiarly fitted and for which she has enthusiasm.

The principal should have the opportunity to nominate candidates for teaching positions in his school. It is he who knows best the working situation and duties for which the new teacher will be responsible. It should be the principal, therefore, who selects the nominee who has the personal characteristics, training, experience and interests most suited to the particular position to which an appointment is to be made. He should hold all of his teachers responsible for educational results of a high level. But he must realize

that teaching of a creative type can be expected only when the teacher is placed in an optimum working sit-

uation and given assistance, freedom and inspiration, in working for the desired educational goals.

Molding Young Personalities

EDWIN M. BRONSON

West High School, Salt Lake City, Utah

IF THE child's personality is to grow and develop normally, he must receive encouragement, praise and assistance in meeting the issues of life. Every child is entitled to interest and understanding in his welfare. Cooperative effort on the part of the home, school and other agencies to understand the child means as much to the healthy growth of the normal child as it does to the adjustment of the abnormal.

Undesirable behavior should not be associated with the child; the behavior is wrong, not the child. No child is all bad. The whole child may be led into complete mental and physical maturity. There is a gap between theory and practice in knowing the factors involved and the approach to be made in terms of the total personality. Theory must harmonize with a working philosophy. In studying the progress being made in mental hygiene, child guidance clinics and personnel work in the schools, we have seen that the economic insecurity, inability to apply mental hygiene knowledge to all pupils and defective physical environment have a decided effect on the growth of personality.

If personality constitutes mentality, physical makeup, temperament and character it is a complex mechanism to change or control. The whole individual as he attracts or repels others is a composite picture. In guiding children toward successful living and wholesome personalities, the educator understands the complete child. This is accomplished by taking a personal interest in the child, by getting his point of view, knowing his potentialities and by understanding his emotional makeup and habits. The development of the mind is similar to physical development in that social contacts and learning experiences are essential to make a rational, self-understanding, cooper-

ative individual. Since growth of intelligence appears to be closely related to interests, every child must find interests suited to his ability and needs. Every teacher should be able to diagnose, predict and control behavior. This is only possible when the teacher has reached self-understanding and has eliminated personal weaknesses and enlarged upon strengths. Before any teacher can help in the development of the personality, she must discover what in the child needs attention. An important task is to get specialized cooperation between the individual, the group, home, teacher and school.

Experiences afforded in the schoolroom give an understanding of the complexity of personality. There is a definite need of knowing and evaluating all negative and positive factors that make up the individual. The teacher should employ case study technics and tests of intelligence, personality, adjustment and interest. Supplementing these are physical examinations, general observation, anecdotal records and continued interviews. The teacher then can make a better program for individual pupils, plan home responsibilities, assign part-time work, be more selective in visits among community plants, determine work in which pupils are interested and select vocations and avocations in harmony with abilities and interests.

This method ensures continued growth of the individual and furnishes, in turn, the tools for learning and developing personality. We must be content with preserving and improving all strengths, maintaining a spirit of success and working toward mental and physical health as a result of training. The individual must face real life situations, evaluate his experiences and act in terms of developed pleasures and knowledge gained.

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Evaluating the School Plant

WALTER CROSBY EELLS

Coordinator, Cooperative Study of
Secondary School Standards

A DETAILED analysis and an evaluation of the school plant are important phases of the complete method of evaluation of a secondary school as developed by the Cooperative Study of Secondary School Standards. The committee in charge of the Cooperative Study, after careful consideration and repeated revisions, has formulated the following "Statement of Guiding Principles" regarding the proper functions of the school plant:

"The plant is one of the major conditioning factors in a good school, but its intimate relation to and influence on the educational program and its outcomes are not always appreciated or understood. The school program may be seriously restricted and impeded or it may be considerably facilitated and enriched with little or no difference in the cost of the plant. The building as planned and equipped is not merely a place of instruction; it is also a functioning part of the educational program itself.

"Because of the increasing and varied demands being made on the secondary school, the school plant has become more and more complex. Adequate provision should be made for these additional functions. Provisions for classroom instruction, while still a major consideration, are far from sufficient.

"When a plant is being planned or an existing building is to be enlarged or remodeled, certain principles generally regarded as fundamental should be given full consideration. Plans should contemplate meeting not only present needs but also those of the future, even though the future is largely unknown. The school plant should be made flexible. The effort should be made to attain more efficient schools at a minimum cost. Wasteful expenditures can never be justified. The building should be attractive and appropriate in design so that beauty may be evident both within and without; it should assure the safety of its occupants, even in emergencies, and

the grounds about the building should have well kept lawns and shrubbery. While provisions such as those mentioned very probably will result in a plant that is economical to maintain and easy to keep sanitary, those responsible for planning must regard such conditions as highly important. The site as well as the building should assure healthful conditions. The entire plant should, whenever possible, be an integral part of a community planning program."

In an effort to translate this statement of general principles into concrete form for studying the site, the building and the equipment of a school, the professional staff of the Cooperative Study has developed a

16 page blank which includes detailed check lists of almost 250 items and specific evaluations of 63 phases of the school plant. A satisfactory and complete evaluation of a secondary school by means of the methods devised by the Cooperative Study requires the school's staff to check carefully the degree of presence or absence of each item on the check lists and to evaluate itself on each of the evaluative items; then to have these self-evaluations carefully checked and, if necessary, revised by a visiting committee of educators working independently in the school.

This plan has already been carried out in the 200 secondary schools in all parts of the country that participated in the preliminary experi-

SCHOOL PLANT

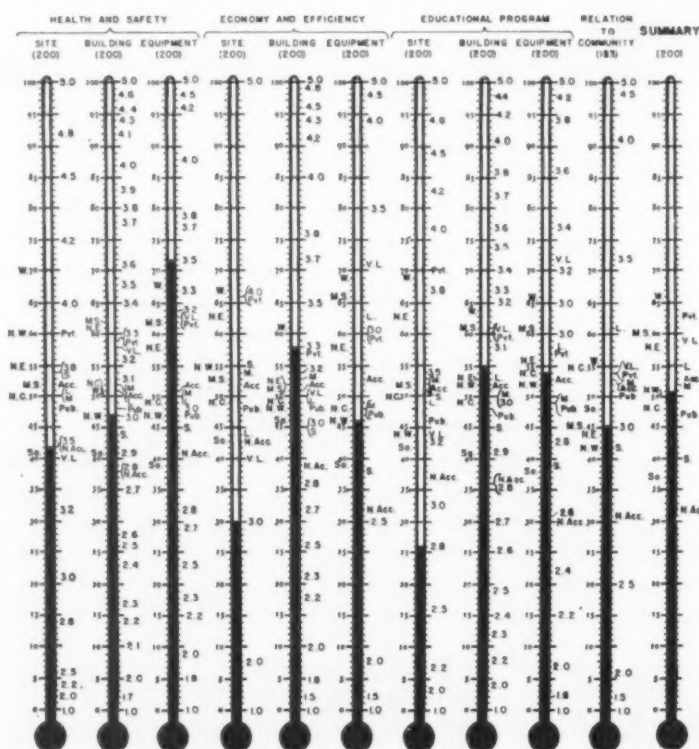


Fig. 1—Educational temperatures for a very large public school.

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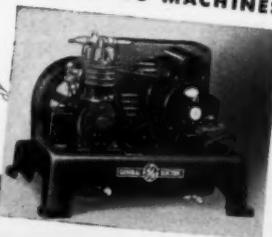
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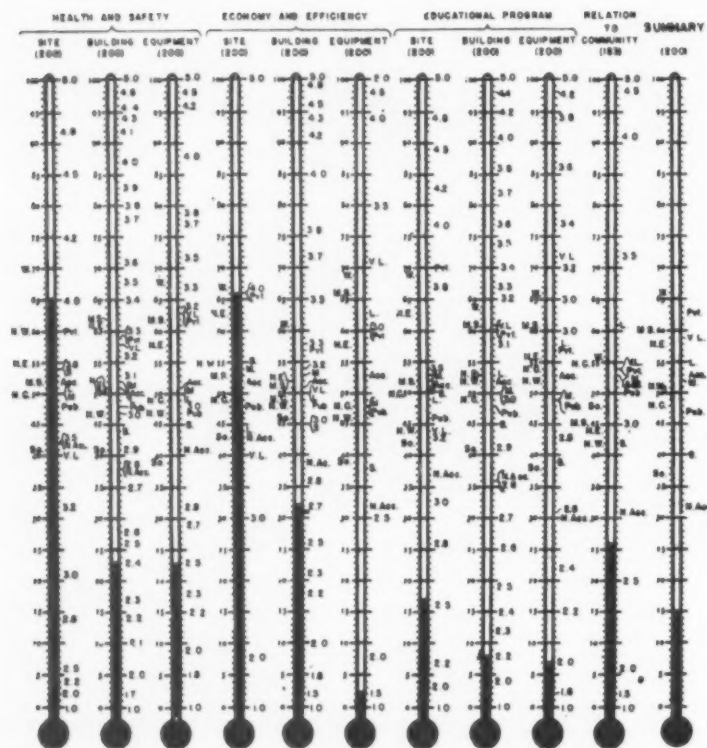


Fig. 2—Temperatures for a small, public, nonaccredited school.

mental year of the study; it has also been followed by a hundred or more schools this year in various states that have been using the method of the Cooperative Study for self-evaluation and for stimulus to growth and improvement in school plant and equipment.

As applied to the school plant the principal analyses have been made from three main points of view, with brief consideration of two others. First, the site, the building or buildings and the equipment are fully analyzed in terms of the health and safety of the school population. Included are such matters as illumination, condition of air, toilet and lavatory facilities, stairways, corridors, exits, control of fumes, safeguarding of machinery, condition of cafeterias and kitchens, and nature of infirmary and dormitory quarters when these are provided. A total of 110 check list items and 29 evaluations of the adequacy and actual functioning of these facilities in terms of health and safety is given. This method is quite different from the score card technic frequently used in

the study of school buildings in the past.

The site, building and equipment then are fully analyzed from the points of view of economy and efficiency of operation. Such matters as flexibility, economy of space, sound-proofing, acoustic properties and signal systems are checked and evaluated, requiring 34 check list items and nine evaluations.

In the third place the site, the building and the equipment are analyzed in terms of the extent to which they are adapted to the educational program that the school ought to be carrying on. This includes special consideration of the play areas, of esthetic factors, of classroom and laboratory space for special classes and studies, of administrative and counseling suites, of library equipment and facilities and the like.

A total of 96 check list items and 21 evaluations based upon them ensures that no features of real significance are overlooked in this important area. As a matter of fact, no less than 50 per cent of the total score on the plant is determined from

this analysis of the suitability of the plant to the educational program carried on in it. A weight of 25 per cent is given to the phases of health and safety; 20 per cent to economy and efficiency, and 5 per cent to a special analysis of the relation of the school plant to the community.

In order to omit no features of unusual significance and to encourage thoughtful consideration of more general aspects, the following five questions are asked:

1. What are the best elements or characteristics of the school plant?
2. In what respects is it least adequate or in greatest need of improvement?
3. In what respects has it been improved within the last two years?
4. What improvements are now being made or are definitely planned for the immediate future?
5. What carefully conducted studies has the school made of its own problems in this field within the last three years?

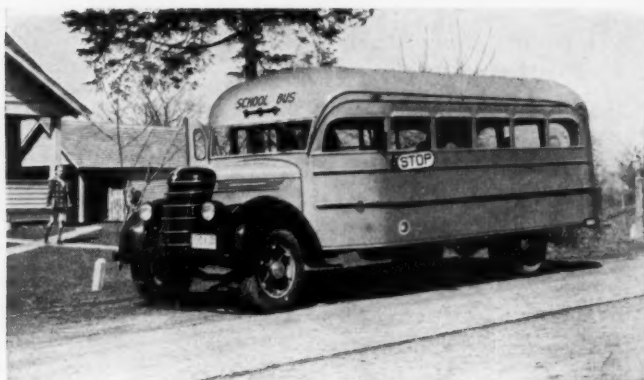
Finally, two general evaluations of the plant are made, one in terms of the extent to which it accords with the general philosophy of education that characterizes the school and the other in terms of the extent to which it meets the needs of the community and the pupil population that the school is serving.

The way in which these criteria of excellence of a school plant are exhibited for the study and use of the administrative officers and board of education of a school is best shown by sample graphs of three of the 200 schools fully analyzed by the Cooperative Study last year. These are given on the "educational thermometers," samples of which have already been presented to the reader in earlier articles of this series.*

Figure 1 shows the educational temperatures for a large public school whose plant as a whole was judged by the Cooperative Study's visiting committee to be equal to or better than 51 per cent of the 200 schools analyzed in terms of its adaptability to local community and pupil needs. It will be noted that this school stands highest in the matter of equipment, a feature that is more readily susceptible of modification and improvement than the more nearly fixed site



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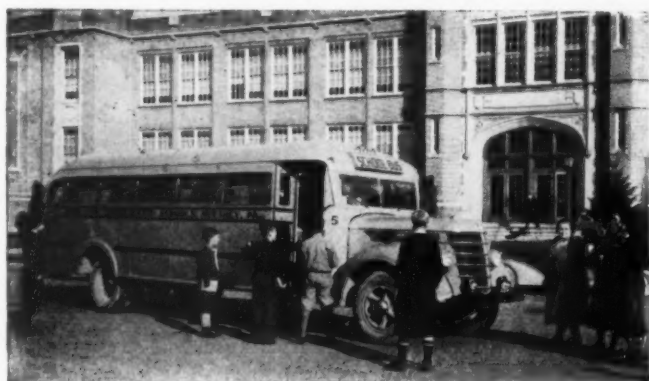
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INTERNATIONAL SCHOOL BUSES

From all three viewpoints the site rates low, and there is little that can be done about it, unless the present site of the school is abandoned and a new one obtained. The building rates highest (58 percentile) in terms of economy and efficiency; it rates lowest (47 percentile) in terms of health and safety. A careful examination of this profile and of the evaluative criteria upon which it is based should enable the administrative officers to make intelligent recommendations to the board of education for significant improvements. Probably without excessive expenditures, the educational temperatures of this school could be raised a considerable number of points so as to give it a distinctly superior plant rather than merely an average one.

By way of contrast, figure 2 shows the plant of a school that is equal to or better than only 15 per cent of the 200 schools studied in terms of its adaptability to local needs. Its site stands at the 65 and 66 percentile points in terms of health and safety, economy and efficiency, but it is poorly adapted to the educational program of the school. The equipment rates distressingly low from all three points of view, even poorer than the building, which is far too low for satisfactory service. Probably this school should consider a complete building program. Such a graph as figure 2 should prove to be a powerful factor in arousing the community to a realization of this need.

Figure 3 shows the educational temperatures for the best school plant found among the 200 schools studied in terms of its adaptability to local needs. It falls below the 90 percentile point in only a single feature, special relationship to community needs. On three thermometers it reaches the top,

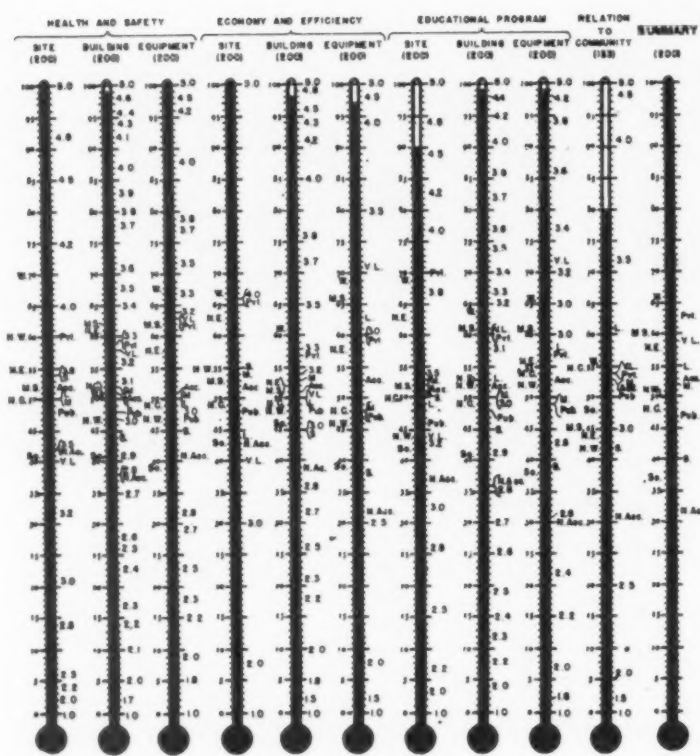


Fig. 3—Temperatures for the best school plant of 200 studied.

the 100 percentile point, and on three others it stands at the 99 percentile point.

Figures 1, 2, and 3 not only show the conditions of the plant and equipment for individual schools but also indicate, by appropriate symbols, norms for different groups of schools of varied type and location. Thus a glance at the left side of the summary thermometer at the right of figure 1 shows that the best plants are found in the territory of the western association (66 percentile); next best in the middle states (60 percentile), and poorest in the area of the southern association (37 percentile).

An examination of the abbreviations on the right side of the summary thermometer shows comparisons for three classifications of schools. The privately controlled schools have distinctly better plants than do those publicly controlled (63 percentile as compared with 47 percentile).

The schools accredited by one of the regional associations have decidedly better plants than those not thus accredited (52 percentile as compared with 32 percentile). The plants

of the very large schools (more than 1000 pupils) are better than those of the large schools (from 500 to 1000 pupils); these are better than the plants of the medium-sized schools (from 200 to 500 pupils); while the small schools (under 200 pupils) rank lowest of all, at the 40 percentile point. All of these statements of relative standings of various groups of schools, of course, imply that the component schools have been evaluated in terms of their adaptability to local needs.

Norms for the same four groupings of the 200 schools studied are also shown on each of the ten component thermometers of figure 1, thus affording a particular school an opportunity to compare its site, building or equipment with those of other schools of similar size, type, location or control with respect to health and safety, economy and efficiency, adaptability to a good educational program and relation to the community that it serves.

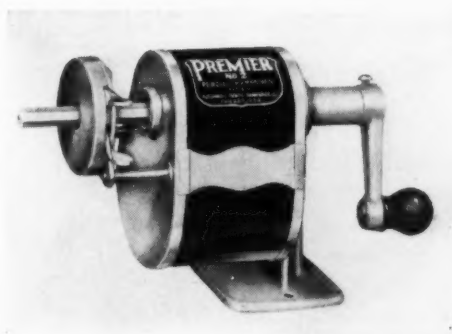
*For examples of these educational thermometers in the fields of curriculum and pupil activities, see articles by W. C. Eells and K. W. Eells in *The NATION's SCHOOLS*, December 1938 and January 1939.

EVER THE LEADER

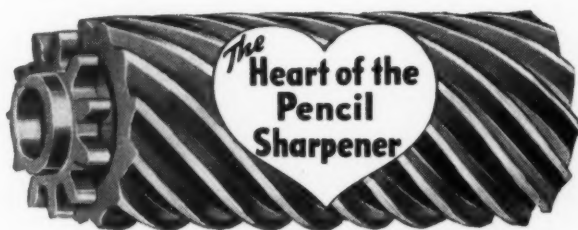


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Open Letter to Administrators

BRENTON E. REYNOLDS

Science Teacher
Barnesville, Ohio

FOR a number of years, I have thought that administrators failed to take into full account their teachers' abilities. Many administrators do, but some become so self-exalted by their positions that they feel that their orders should not be questioned.

A great number of them sit in administration classes in colleges and universities. They hear about the new and better methods of teaching and get all "fired up" about them. They resolve that they are going to break with tradition, that they are going to have a school outstanding in its forward movement. But they lose their sense of balance. They must remember that they are, perhaps, the only member of the school system who is being "rejuvenated" by this powerful, forceful preaching of newer methods. They must remember that the teachers have been considered successful by other administrators and by the community. They are not able to change overnight to some new method of teaching.

Be grateful that the teachers won't change overnight. If they did the school would be a medley of confusion before the first school month was over and the administrator would be looking for another position by the time the school year was finished.

If the teachers are to be forced into new methods before they have had time to think things through, the administrator becomes a dictator. If he has developed a spy system and a means of punishing teachers, he may rush forward at an unheard of pace, but I pity him if he makes a mistake. His teachers and even his spies will turn upon him.

First, Mr. Administrator, help me in my work as classroom teacher to impart the lesson of democratic government by democratic methods. If

This is a letter to school administrators from a teacher. It is to be read as a warning by some and to be carefully considered by others, for it is a teacher's true experience. It represents trying experiences, sincere convictions and a philosophy of education and of life. This teacher does not wish to convey the impression that all administrators are like those to whom the letter is addressed. It is his conviction that only a few are administrators of that type. He is now serving under excellent supervision, but twice he served administrators who made life disagreeable for their teachers.

I am to succeed in producing pupils who can think for themselves, who are democratic, liberty loving people, who wish to protect, defend and improve their country, I must teach them not alone by words but by illustration and example. I must work out with them democratic ways of conducting class recitations and classroom procedures. We shall make mistakes, yes. But all types of governments make mistakes. The pupils will be learning about those mistakes and how to correct and avoid them.

Do you want me to produce citizens able to live under a democratic government, citizens who can weigh propaganda and think for themselves? If you believe in democracy let your school system be democratic. Practice what you preach. We teachers are sick of hypocrisy!

Let your teachers work with you in determining school policies. If you disagree with the policies that are developed together, give the teachers your honest and sincere reasons. You will find that they are reasonable. They do not want to do harm to the school system or to you. You will win their respect and loyalty if you will treat them as fellow workers and not as subjects. If you are willing to abide by and have faith in their reasoning, you will find that they will respect and have faith in yours.

In teachers' meetings let your teachers do at least half the talking.

Time yourself, if you must, but do it. You will find that you have been doing most of the talking in the meetings and that the teachers, with poker faces, have been quietly pretending interest. Is that what you want?

If there is no response for a short while, do not be afraid of silence. A little quiet meditation before a response is to be cultivated and desired. Then, after all the business has been taken care of, adjourn. If the meeting has only taken five or ten minutes, dismiss it when the business is over for the teachers have many other things to do. Should there be a little amusement and fellowship? Yes, but too much is worse than none at all.

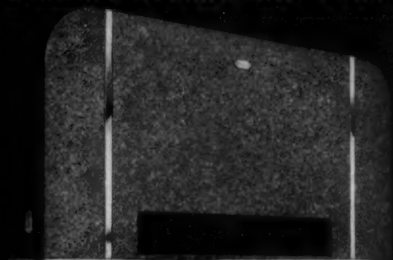
Let your meetings be truly democratic. You are chairman of a town meeting; you are not the spokesman of the occasion. Keep your poise and dignity but be democratic. Encourage your teachers to use democratic methods in dealing with classroom situations.

Second, Mr. Administrator, we teachers welcome constructive criticism. We realize the value of helpful suggestions and know that there are mistakes made that we cannot see as quickly as an onlooker. You are welcome, any time, to come quietly into our classrooms. We should like to talk over your impressions after each visit. We want to improve and

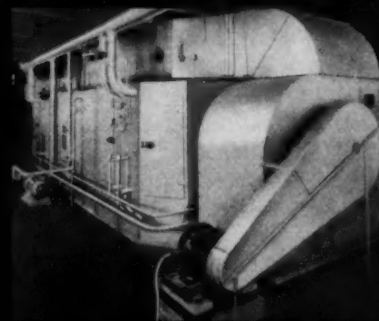


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will improve under kind, constructive criticism.

But please do not disrupt my class by coming in three or four times a day with announcements and messages. Just come in quietly and stay for at least three-fourths of a recitation. You cannot know what I am doing in a five or ten minute visit. I cannot respect that kind of a visit. Let your teacher be supreme in the classroom. Announcements and messages have a place, but can they not be distributed during an activity period or before or after school? Is it not your duty to see that the classroom teaching goes on uninterrupted? Exceptions should be made but be sure they really are exceptions.

After all, schools are organized to teach pupils and not just to be administered; your position is somewhat outside the teaching process. It is a necessary position but it should help rather than hinder the teaching

process that takes place in the classrooms. Think on these things and govern yourself accordingly.

Third, you have certain methods of teaching that you think are good. I have others that I feel are just as good, if not better. There is no all-supreme method of teaching. No two teachers use the same method in exactly the same way. Each teacher must find for himself the most successful method and develop it. We must grow and develop continually; we do this by watching and reading about other teaching methods, by trying out new and varied teaching methods in our own classroom, by real and vicarious experiences.

You can help me by arranging my schedule so that I can observe other teachers and read about other teaching methods but do not expect me to teach exactly like any other teacher in the system. You could not do it yourself. Help me to become the best

teacher that I can become, help me to develop my own strong points, but do not try to make me a walking replica of yourself or any other teacher, for (I warn you) you will fail. I respect your ways of teaching. In all fairness, you should see my strong points as well as my weak ones and respect my ways of teaching.

Fourth, Mr. Administrator, I should enjoy visiting one of your classes. I should like to talk over the whys and wherefores of some of the things you do in your classes. I have heard it expressed that an administrator of a school need not be a good teacher, but I feel that, in order to see and understand the problems of his teachers, he should be a fair teacher.

Fifth, Mr. Administrator, I should like to have each child in my classroom during the entire period. Please, can't administrative assistance take place during study or activity periods? Must some of my pupils sit in the office to answer the phone or run an errand when they are supposed to be in my classroom? I am responsible for the success or failure of each of my pupils and they will not learn much sitting in the office waiting for the phone to ring.

If you must have someone out of a classroom, why not take them out of study periods or out of your own classroom? Would that not be fairer to me? Of course, there are exceptions and any teacher is willing for exceptions to occur.

Please, do not think me disrespectful of authority; I realize that I am doing an unheard of thing. I am willing to follow but do not try to drive me forward (or backward) without giving me time, first, to think things through carefully.

I am not a pupil. I am a trained teacher with experience and a certain degree of success. A teacher to be a success must not feel inferior. His feeling of balance and poise cannot be overturned without a corresponding drop of his success.

Praise will achieve much more than censure. Examples and illustrations are more forceful than words. If I know that you have faith in me and trust my judgment, I am more willing to follow yours.

When Showing Films

ALEX JARDINE

Evansville Public Schools, Evansville, Ind.

TO PREVENT damage to visual education films by operators, visual education authorities of the schools at Evansville, Ind., have set forth the following rules for the use of films:

"1. If you do not operate a projector frequently, call for assistance from someone who does.

"2. If you teach in high school and do not run a machine frequently, then by all means get a pupil operator. So far in our school system not a single film damaged has been damaged by pupil operators.

"3. A film cannot be damaged if the machine is properly threaded. When a film stops running, the machine should be carefully checked as to threading. Do not hold the clutch in position to make the film run. Invariably holding the clutch will result in film damage. In some instances whole reels of films have been damaged and the teachers who last operated the film disclaim any knowledge of the injury. If you

damage a film, put a note in the can to that effect. If the damage is slight we can repair the film.

"4. If the machine stops running then be sure to turn off the projector lamp while rethreading. Failure to do this may result in a burned or a blistered film.

"5. Let the motor run for a few minutes after the projector lamp has been turned off. This tends to lengthen the life of the lamp.

"6. For the sake of those who may wish to use the film after you, will you please be careful when showing films?"

Until the last few weeks little film was damaged in the Evansville schools. Then, within a three week period, ten films were damaged seriously in school showings, at least four of which were damaged by the same operator. Evansville's film library wishes to encourage a maximum use of all facilities, but unless films are handled carefully the library will be rapidly depleted.



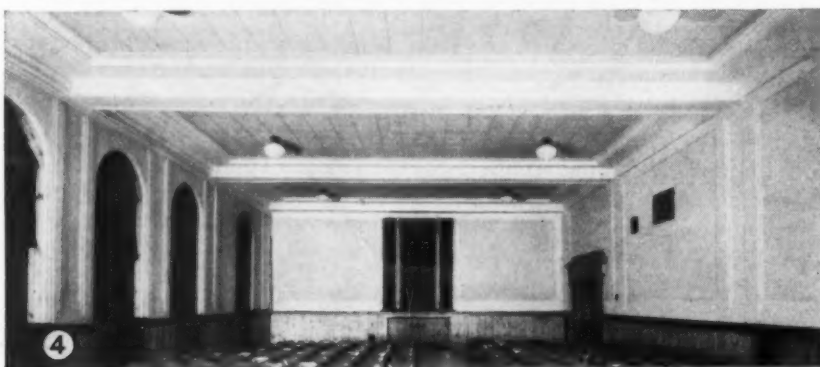
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Tenure in One State

M. M. CHAMBERS

Specialist in School Law

LOUISIANA joined the growing company of commonwealths having state-wide teachers' tenure laws upon the passage of Act 58 of 1936, which became effective on July 28 of that year. This act provided for a probationary period of three years and "blanketed in" all teachers who had served in any one parish for three consecutive years and were still in the employ of the same parish on its effective date.

The language was unmistakable: "All teachers presently in the employ of any parish school board who hold proper certificates and who have served satisfactorily as teachers in that parish for more than three consecutive years shall be, and are hereby declared to be, regular and permanent teachers in the employ of the school board of that parish."

The courts of the state have consistently interpreted the clause quoted above to mean exactly what it says; a recent decision adds a refinement by holding that the probationary period of three consecutive years may be partly prospective and partly retroactive from the date when the act went into effect. Thus a teacher who had been employed in Union Parish through the school years 1934-35 and 1935-36, prior to the passage of the act, and continued for a third consecutive year (1936-37) after its passage, was entitled to reemployment as a permanent teacher in view of the fact that the school board took no steps to terminate her service until after it aggregated more than three consecutive years.¹

The opinion of the court expresses understanding of the aims of the tenure legislation: "The teacher tenure act was designed to accomplish a laudable purpose. If sanely and impartially administered, the beneficent results inevitably to follow will vin-

dicate the persistent efforts of its champions in procuring its adoption. It was intended, *inter alia*, to protect the worthy instructors of the youth of a parish from enforced yielding to the political preferences of those theretofore having the power to grant or withhold employment to them. . . ."

After further elaborating its conception of the purpose of the act, the court proceeds to declare that such a law is properly to be construed liberally in favor of the teachers, who were obviously intended to be its immediate beneficiaries.

In a companion case brought by a teacher who had taught in Union Parish for twelve consecutive years, through 1936-37, the issue was simpler. Clearly this teacher had the necessary three consecutive years of probationary service, whether counted wholly prior to the passage of the tenure act or partly before and partly after that date, and after peremptory dismissal she was entitled to reinstatement with back pay.²

Similarly in an earlier case a teacher in Vernon Parish who had been employed continuously by that parish since the beginning of the school year 1933-34 and had been reemployed twelve days before the effective date of the tenure act in 1936 had acquired permanent status and could not be denied reemployment for 1937-38 without proof of specific charges at a hearing as prescribed in the law.³

Teachers who rely upon three years of service prior to July 28, 1936, must show that such service was consecutive and immediately prior to that date. Thus a teacher in Vernon Parish for eighteen consecutive years prior to 1933, who was not employed for two years from 1933 to 1935, but was

reemployed for the year 1935-36 and after, must count his probationary service from the date of his reemployment in 1935 and could not attain permanent status in 1937.⁴ Likewise, a person teaching in Red River Parish continuously from 1914 to 1935, not employed for the year 1935-36 but reengaged for 1936-37, could not claim permanent status in 1937.⁵

"No permanent teacher shall be removed from office," says the tenure act, "except upon written and signed charges of wilful neglect of duty or of incompetency or dishonesty, and then only if found guilty after a hearing by the school board of that parish. . . ."

In Jefferson Parish a woman teacher who had completed her ninth year of consecutive service was denied reemployment in July 1937 solely because she had recently married, and the school board had a rule to the effect that marriage would automatically terminate the services of a female teacher. She asked for reinstatement at the beginning of the school year in September and, upon being refused, appealed to the state superintendent of education, who wrote to the parish school board in February that marriage was not a lawful cause for the dismissal of a permanent teacher. Finally she filed suit for reinstatement in March, eight months after her discharge. At the conclusion of the case in the following October, she was ordered reinstated with full salary of \$1170 (as provided in the salary schedule for the tenth year of service) for the year 1937-38, and with salary at the same rate for each succeeding month until reinstated.⁶

The lapse of eight months between her dismissal and the filing of the

¹State ex rel. Chaney v. Vernon Parish School Board (Peace, Intervener), (La. App.), 179 So. 320 (1938).

²Read v. Union Parish School Board, (La. App.), 185 So. 67 (1938).

³State ex rel. Temple v. Vernon Parish School Board (Peace, Intervener), (La. App.), 178 So. 176 (1938).

⁴State ex rel. Kennington v. Red River Parish School Board, (La. App.), 185 So. 490 (1938).

⁵State ex rel. Kundert v. Jefferson Parish School Board, 191 La. 102, 184 So. 555 (1938).

¹Andrews v. Union Parish School Board, (La. App.), 184 So. 574 (1938); affirmed, 184 So. 552 (1938).



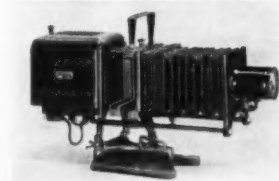
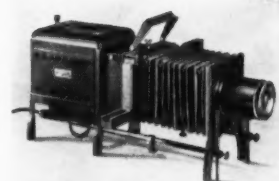
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suit, said the court, was not ascribable to her negligence but rather to the unlawful resistance of the school board to her rightful claim. This sharply distinguished the case from certain earlier cases of married women teachers whose delay in asserting their rights was held to constitute *laches*, barring their suits.

In one of these cases the teacher, having married during the summer vacation, mailed her resignation to the school board, believing that she had no other recourse. About a year later, having become informed of her rights as a permanent teacher, she sued for reinstatement. The court, passing the question of the resignation, denied the claim on the ground of *laches*; a companion case was similarly terminated.⁷

Undue delay was also the ground on which the court chose to base its

decision defeating the claim of a teacher who had taught eighteen years in Evangeline Parish up to June 1936 but was not thereafter reemployed.

Then, more than two years later, in July 1938, she sued for reinstatement with back salary for two years. Avoiding the question of whether or not she became a permanent teacher on July 28, 1936 (effective date of the tenure act), the court disposed of the case by holding that since the record showed no reason for a delay of two years before instituting the suit, the claim was barred by *laches* on the part of the complainant.⁸

⁷State ex rel. Calamari v. Orleans Parish School Board, 189 La. 488, 179 So. 830 (1938); State ex rel. McMurray v. School Board, 189 La. 502, 179 So. 834 (1938).

⁸Fontenot v. Evangeline Parish School Board, (La. App.), 185 So. 104 (1938).

Calling All Custodians

LESTER B. ROBERTSON

Custodian-in-Charge

Consolidated Schools, Guernsey, Wyo.

NOW is the time for everyone who is interested in the economical operation and maintenance of school buildings, large or small, to prepare himself through a course of study and training, *i.e.* if he wants to qualify as a custodian-engineer.

To take care of modern installations of delicately adjusted equipment, such as temperature, ventilation and illumination controls, radio, telephone and projection equipment, and various recording devices, the custodian must be a trained engineer. Only trained men can expect to be retained in such positions.

We are living in an age of specialization. Continual study is necessary for anyone who has a desire to improve his position. So many well-trained graduates are now being turned out of the technical and vocational schools each year that the untrained person is likely to be displaced by one who is better trained. The superintendent is going to appreciate, too, the services of a custodian who is sufficiently interested in his work to sacrifice his own time and money to study job requirements.

Improvements in public building conditions through the presence of trained custodians have been recognized in Minneapolis, Denver and Los Angeles, among other points. Further facilities for such training schools will, in consequence, be in demand.

The Minneapolis training school for custodian-engineers was organized twenty years ago for the purpose of preparing men already in service to qualify for the operation of heating and ventilating equipment under a ruling of the Minnesota State Department of Boiler Inspection. Since that time, several states have organized custodian-engineer training schools. Colorado State College of Education at Greeley is entering its fifteenth year. Kansas State Teachers' College at Pittsburg has more than ten years' experience in custodian training. Then there are courses at the University of Wisconsin, the University of California and the State University of Iowa. In several other commonwealths, such training is offered by state departments of vocational education, and

many training courses are governed by city custodian associations.

In many of the schools offering such courses, at least one instructor is a graduate of the engineering department of a university. Other instructors are specially qualified for their work. The training given to custodian-engineers in Minneapolis is one of the most complete. The work is organized in two sections: one for custodians who have not attended the school in previous years and another dealing with more complicated phases of the work.

At the Colorado State College of Education, the work consists of lectures, discussions, a question hour, demonstrations, principles of efficient firing methods and combustion. Special lecturers are usually obtained to deal with problems of ventilation, sanitation, illumination and electrical maintenance, in addition to the regular classes. Entertainment features include swimming, softball, picnics and motion pictures. This makes the week a fine combination of interesting work and relaxation.

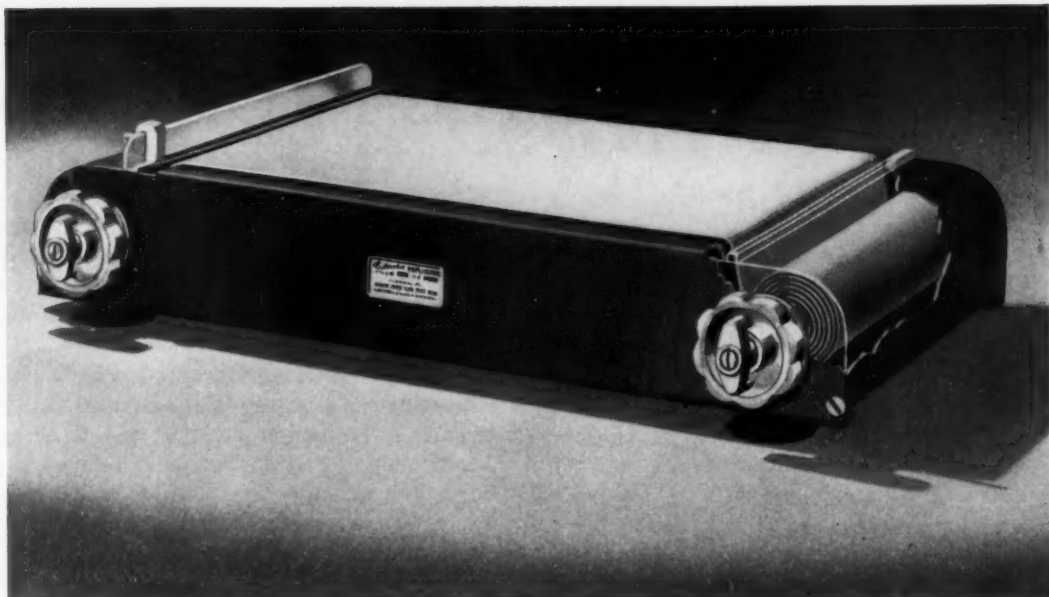
This type of course is the most common form of organized training being given to custodian-engineers. R. G. Dempsey, superintendent of buildings and grounds at Greeley, Colo., reports that the college has had an enrollment of as many as 75 custodian-engineers.

It has been indicated by a professor of vocational guidance that as many as 80 per cent of the nation's workers are dissatisfied with the work they are doing. This may be attributed to lack of attention to the requirements of the vocation. Under such conditions, is it any wonder that inefficiencies exist?

It is up to every custodian-engineer to acquire every professional qualification and, if possible, attend each year some custodian training school, as an aid in keeping in touch with new developments. School plants will be made to yield a maximum of service as the result of training.

Is there any question of the importance of such a function when it has been estimated that one-half of the interest paid out on the extra investment incurred by improper maintenance of public buildings would be more than sufficient to pay all costs of proper maintenance?

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Plumbing Free From Pollution

F. M. DAWSON

Director, Institute of Hydraulic
Research, Iowa City, Iowa

CITY water departments supply pure water through their mains to the various buildings served by their piping distribution system. Whether this water reaches the ultimate consumer in a pure condition frequently depends on whether or not the piping and plumbing fixtures in the various individual buildings are of proper design and installation. The two principal factors that may cause water pollution within the pipes of a building, before that water reaches the consumer, are the presence of "cross-connections" and the possibility of backsiphonage, or backflow from improperly designed or installed plumbing fixtures.

Cross-connections and backsiphonage have been intensively studied by hydraulic and sanitary engineers, plumbers and public health officials during the last few years. The result is that the problems involved in water pollution by cross-connections and backsiphonage are now thoroughly understood. Methods of preventing the possibility of water pollution from these causes are likewise understood. It is now vitally necessary to apply this knowledge, especially in public buildings.

Although it is not necessary to go into any great detail regarding what cross-connections are and what is meant by backsiphonage, a reemphasis of a few fundamental principles will not be out of place. A cross-connection refers to any situation in the water supply piping where a direct connection is made with an impure water source or a sewage waste pipe. Wherever such a direct connection exists, even if numerous valves separate the pure water from the impure water or the sewage, the possibility that the pure water may get polluted always exists. Reliance can never be placed upon an ordinary valve or check valve.

Examples of serious direct cross-connection sometimes found in school buildings are the following: Building custodians and others not infrequently have connections made from

a water pipe to a sewer for purposes of flushing to prevent clogging. Such a connection is most dangerous and should never under any circumstances be made. Where swimming pools exist, various cross-connections may be present between the piping that circulates the pool water and the pure city water. The water to a pool should be supplied through a pipe discharging above the top of the pool, or through some other type of broken connection. Direct connections are made to urinals and toilet bowls, thus presenting extremely dangerous conditions.

The question immediately arises as to how pollution can enter a water pipe when that pipe is under pressure. Under ordinary conditions the

presence of any opening, even of one normally discharging into a source of pollution, would allow water to flow from the pure water pipe out, instead of the polluted water back into the pipe. The answer is that in so much as a positive pressure does not at all times exist in water pipes, this line of defense is undependable. Valve closing, pipe breakage, unusually heavy water usage, as during fires, and many other conditions frequently cause the water pressure to drop to zero atmospheric pressure, or even below. This condition creates a partial vacuum in the pipes. If any point in the piping system is connected to or submerged in polluted water, this results in a sucking back of the polluted water into the water pipes. What should be pure water in a clean pipe then becomes highly dangerous. This is what is referred to as "backsiphonage."

The places in a water piping system where backsiphonage is most likely to occur are at various plumbing fixtures, tanks or other water-using apparatus that have, or may have, the water supply inlets submerged in polluted water or in sewage. Any open tank is likely to be so polluted.

Fixtures common in schools which may permit backsiphonage are flush-valve closet bowls, toilet tanks, sinks and tanks in laboratories; also, aspirator connections. In figure 1 is shown how backsiphonage can occur from a clogged toilet bowl fitted with an ordinary unprotected flush valve. Siphonage may also occur from such bowls even if they are not flooded if the vacuum in the water pipes is high and if the rim openings on the bowl are small, partially buried or otherwise stopped up.

For example, in a school in Missouri the children suffered at various intervals from mild attacks of gastrointestinal disturbances. The water was finally suspected and various bacteriologic tests were made. It was found that although the city water showed no pollution, the water obtained from drinking fountains in



Fig. 1 — How backsiphonage can occur from a clogged toilet bowl with an unprotected flush valve.

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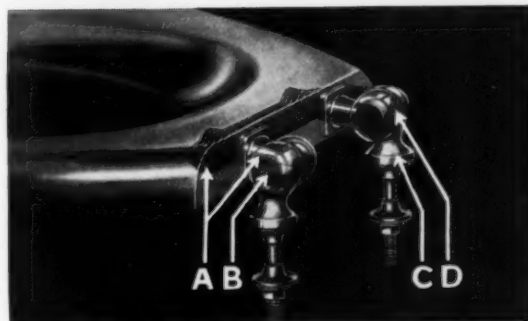
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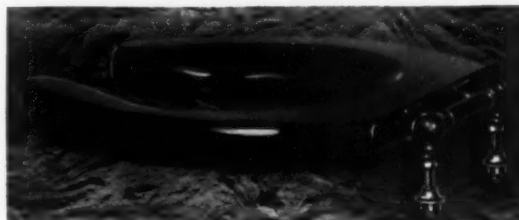
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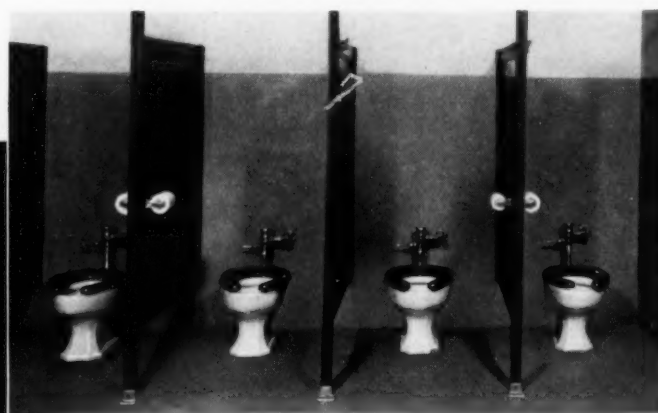
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Fig. 2 — A cross-section view of a toilet bowl equipped with a flush valve which has a vacuum-breaker between the bowl and the valve.

the school did show pollution. A thorough examination of the piping did not reveal any direct cross-connections. The toilets were of the tank style.

Questioning of the janitor revealed that he always shut off the water to the building every evening in order that a pipe breakage would not result in flooding the building. Now this shutting off of the water pressure and the slow draining of the pipes through some leaky valve at a fixture in the basement produced a vacuum that sucked the water out of the closet tanks and into the pure water pipes. Tests indicated that the water in the closet tanks was capable of producing intestinal disturbances.

Vacuums in water pipes of buildings are not caused solely by shutting off the water pressure, as was the case in the foregoing example. The most common cause of vacuum formation is the use of large quantities of water on the lower floors of buildings where the pipes are undersized or reduced in size owing to corrosion or to lime deposition. The flow of water through undersized pipes causes a drop in pressure; it can readily fall so low that vacuums are created on the floors above.

Investigations reveal that undersized pipes and improperly laid out piping systems are unquestionably the most common cause of vacuum formation in water pipes. It is safe to say that 90 per cent of all vacuum formation (and thus 90 per cent of all the backsiphonage hazards) is due to undersized and improperly de-

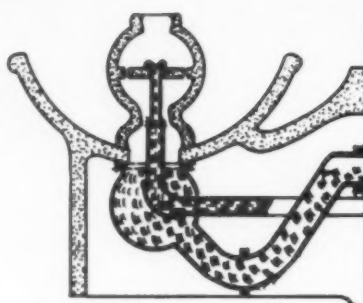


Fig. 4 — An improperly designed fountain in which the pure water connection leading to the bubbler passes through the water standing in the drain, a dangerous setup.

signed or installed water piping systems.

Although proper design of the piping system will do much to eliminate the possibility of backsiphonage and resultant water pollution, the complete prevention of vacuum formation is impossible because of various unforeseen contingencies. Therefore, to secure complete protection it is necessary to eliminate submerged-inlet fixtures or to protect every such fixture with a backflow preventer, usually called a vacuum-breaker. In figure 2 is shown a cross-section view of a toilet bowl equipped with a flush valve which has a vacuum-breaker installed between the top of the bowl and the flush valve. Vacuum-breakers for closet tank, float-operated valves and for other types of submerged-inlet fixtures are also available and may be purchased through any reputable plumbing contractor. Vacuum-breakers must always be installed on the discharge and not on the supply side of all control valves leading to submerged-inlet fixtures.

In school laboratories many dangerous types of submerged-inlet fix-



Fig. 3 — Bacteria from a laboratory may enter a water supply through a submerged hose that is attached to the sink faucet.

tures may exist. Various sinks and tanks may have water inlets below the top of the fixtures. Recently at Michigan State College a disastrous epidemic of undulant fever occurred with a total of 40 cases and one death. As reported by medical and engineering investigators, the bacteria causing this rare disease entered the water supply through a submerged hose attached to a sink faucet in the basement of the bacteriology laboratory of the college (such as shown in figure 3).

The sink was used to wash contaminated glassware, and a rubber hose was used in the washing process. This hose was at times submerged in the bacteria-infected water standing in the sink. Sanitary engineers from the health department tested the water supply system and found that when a number of taps in various parts of the building were opened a vacuum occurred at the laboratory sink faucet, which was capable of sucking into the pipe any pollution through the submerged hose inlet. Tests made with a green-colored liquid indicated that, after the coloring was sucked into the pipes, it reappeared at every faucet in the building, including the drinking fountains used by students.

Another type of apparatus used in school laboratories that may produce submerged inlets is the water-operated aspirator. The ends of hose connected to such an aspirator may be allowed to lie in polluted or poisonous liquids; these liquids, if a vacuum occurred, could be sucked



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Cleansing By-pass protects against this danger.

The cut-away view above shows a Watrous diaphragm valve in flushing position with the arrows indicating the direction of flow. Note the little plunger in the by-pass orifice. This is the patented, self-cleansing feature. Every time the valve is operated this plunger cleans the orifice, protecting against clogging with sand or scale and keeping the valve operating at maximum efficiency. The same features are incorporated in the Watrous Imperial piston type valve.



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Exhaustive tests have shown that a Watrous Flush Valve adjusted to meet the exact requirements of a toilet fixture *right on the job*, frequently makes it possible to reduce the water consumption one or two gallons for each flushing of the fixture. In many instances this represents an actual saving of more than a dollar a year per fixture. In other words, Watrous Flush Valves actually pay for themselves in the water they save.

This Watrous Water Saver Adjustment is exceedingly simple. Just remove a cap at the top of the valve, take a screw driver and turn the adjustment screw and the flushing time can be lengthened or shortened as desired, without even shutting off the water or disturbing any connection. Watrous is the only make of flush valve offering BOTH diaphragm and piston type flush valves that are ADJUSTABLE from the outside without disassembling the valve.

IMPERIAL VACUUM BREAKER

The Watrous Diaphragm Flush Valve shown above is equipped with an Imperial Vacuum Breaker which provides positive protection against back syphonage. The use of vacuum breakers is recommended as a safety measure by many authorities. Imperial Vacuum Breakers can also be applied to old installations of any make flush valve.

Watrous Flush Valves

Diaphragm and Piston Types

THEY PAY FOR THEMSELVES IN THE WATER THEY SAVE

back into the water pipes. If an aspirator is to be so connected that a fairly permanent submerged inlet may result, a vacuum-breaker should be installed between the water-control valve and the aspirator itself. Temporary hose connections should not be allowed to remain connected to the aspirator when not in use.

A fixture that should receive considerable attention from school authorities is the drinking fountain. Some of the older fountains have dangerous cross-connections. In figure 4 is shown the cross-section view of a fountain in which the pure water connection leading to the bubbler passes through the water standing in the drain. An examination of one such fountain disclosed the fact that the water connection had a leak at the elbow where it was submerged in the drain water. Not only would a vacuum in the water pipes cause the drain water to be siphoned back into the water pipes through this leak but it would cause the drain water to mix with the pure water going up to the bubbler. No quicker way of spreading disease could be imagined than through such a drinking fountain.

Besides the danger of direct water pollution, we have that of spreading of disease by fountains improperly designed as regards their water supply jet. Fountains of the bubbler type are the worst offenders in this respect. Some years ago a survey of bubbler fountains was made at the University of Wisconsin and the fact was disclosed that streptococci were present on the bubblers of 50 per cent of the fountains examined.

The proper design of drinking fountains is described in Bulletin No. 87 of the Women's Bureau of the U. S. Department of Labor.

In conclusion, it should be pointed out that several water-borne disease epidemics are directly traceable to backsiphonage and to faulty fixture design. A far larger number have been traced to various types of direct cross-connections between pure and impure water sources. Nevertheless, the fact should be kept in mind that water pollution caused by backsiphonage may be entirely momentary and difficult to prove after the pollution is gone.

In a few cases, amebic dysentery epidemics largely caused by faulty plumbing have been found. In these

cases the water pollution was so obvious that little doubt could exist as to the source of the pollution. Numerous cases of minor intestinal disturbances develop now and then and, though the fact that they are water-borne seems apparent, it is extremely difficult to discover and prove that the plumbing was faulty. Pollution, for example, may have been sucked into the piping system; it may have remained there for a few hours and then gradually disappeared. Thus a few cases only of intestinal disturbance may have developed among those persons who chanced to use the fountain during the time the pollution was present. The exact period

between the ingestion of the bacteria and the time that the disease symptoms appear varies with different individuals, hence, the extreme difficulty of finding the exact circumstances responsible for the pollution. The villain escapes again.

The safest procedure under all circumstances is to eliminate the possibilities of water pollution as much as possible. When we think of the expense involved in making pure water available to all, we must conclude that considerable effort and even further expense are justified in making sure that the condition of this water is not hazarded by faulty installations just before it reaches the consumer.

BETTER PLANT PRACTICES

When It Comes to Dusting

"A sanitary duster, a large piece of cheese cloth or a loosely knit dust cloth is best for dusting." We have three authorities for this statement: Troy D. Walker, principal, Baker High School, Baker, Ore.; D. A. Emerson, and Dr. V. D. Bain, Oregon State Department of Education, Salem. In "A Manual of the Construction and Care of School Buildings" issued by C. A. Howard, superintendent of public instruction, they state that properly treated and used, any one of these three is effective.

"The dust should be absorbed within the folds of the duster rather than stirred up to settle later upon the furniture and woodwork. For this reason, a feather duster should not be used. To remove dust from furniture and woodwork, the sanitary duster of soft woolen or cotton yarn attached to a wire frame and having a short handle or some other means for holding it is to be preferred, from the standpoint of time required. The cheese cloth has an advantage in dusting some parts of the woodwork and the iron standards of desks and seats. It is inexpensive and may be disposed of when it becomes soiled, whereas the sanitary duster must be cleaned.

"Dusters should be treated so they will hold dust. Untreated dusters of any kind will not retain all of the dust, even if they are used carefully. Water is not a good treatment since its continued use will tend to dull the finish of furniture and woodwork. The water dampened duster has a further disadvantage in that it needs to be washed more frequently than an oiled duster. This need may occur several times during a single morning's dusting. If it is not kept clean it streaks.

"Sanitary dusters and dust cloths are treated chemically to retain the dust. Cedar oil, furniture polish or kerosene are also satisfactory, but each should be used sparingly, and the oil or polish should be allowed to evaporate until only enough remains to catch and hold the dust. Treatment seems to have little effect upon the time required to dust unless it may be said to increase the time slightly, because of the thorough work performed by the treated duster. Tests showed that it required on an average only sixteen seconds more time per classroom to dust with treated dusters than with untreated ones.

"A janitor should dust only one row of desks at a time, the row to his right if he is right handed. He should return through the same aisle dusting the next row, which will then be the row to his right. He should not attempt to dust two rows of desks with a duster in each hand, nor should he turn from side to side to dust two rows of desks.

"Three different motions may be used in dusting: (1) flipping the duster against the parts being dusted; (2) a circular motion over desks, probably the most commonly used; (3) wiping the space back and forth. Although it is the fastest of the three, the flipping motion is entirely unsatisfactory because it stirs up the dust and misses some portions of the furniture. The circular motion is not entirely satisfactory because some portions are dusted several times, and the corners and edges may not be dusted at all. The systematic back and forth motion is to be preferred. It covers all parts of the desks and seats and does not stir up the dust."

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School Equipment Dilemma

RAYMOND V. LONG

Director, Division of School Buildings
Virginia Department of Education

PRIOR to the last few years, it was customary with most school purchasing authorities to buy equipment in much the same manner that they would make personal purchases. Except in some of the larger urban centers, the purchase of school equipment was an occasion that caused school authorities relatively little concern. In fact, school equipment purchases in the past have represented such a small proportion of the total capital outlay that school authorities, administrators and educators have given little serious thought to the problem except in relatively few cases.

It was not uncommon to find superintendents and school boards making equipment purchases largely on the basis of personal preferences or good salesmanship on the part of a manufacturer's representative.

Public school purchasing authorities who would not consider awarding a contract for a building to other than the lowest responsible bidder have without hesitation bought equipment without competitive bidding or from other than the low bidder.

Tax Money Is Another Thing

Such action in many cases could be partially justified if a competent comparison were made between the various items of equipment offered, but where such practices are employed in purchasing with public tax money there will inevitably develop valid protests and objections from equipment vendors as well as from taxpayers.

The problem has become more important to many school authorities since the advent of P.W.A. where equipment purchases are aided by federal grants in building and equipping new school buildings. Through misunderstanding, it is assumed by some that an inflexible P.W.A. regulation requires school authorities to purchase from the lowest bidder regardless of quality and of the owner's wishes. This assumption is only partly true. Unfortunately, some equipment manu-

facturers and distributors have not attempted to correct this misunderstanding. On the contrary they apparently have endeavored to strengthen it. Based on experience in the construction and equipping of several hundred school buildings under P.W.A. grants, it may be assuredly stated that P.W.A. regulations have not interfered with the school authority purchasing what he wanted, by way of quality or design, provided the purchasing authority definitely specified by open technical specifications what he wished to purchase and provided, also, that such specifications allowed reasonable competitive bidding.

Principle of Bid Purchasing

The dilemma in which school authorities frequently find themselves in purchasing equipment when they are required to accept the low bid, which imposes on them equipment either inferior in quality or lacking in certain desirable design or construction features, is in most cases the result of inadequate descriptive or technical specifications or because the specifications have been written around a particular manufacturer's article. In the case of the former, the purchaser should either accept the low bid, even if the quality is inferior, or he should reject all bids and draw a proper specification. In the case of the latter, which is in reality a tightly closed specification, in order to provide for competition, other manufacturers must be permitted to offer products similar in general to that specified. Based on experience, the P.W.A. is standing firmly on a basic and thoroughly defensible principle: Those entrusted with authority to expend public tax money for buildings and equipment are encouraged to purchase quality products, but such products should be purchased in open competition and on adequate technical specifications.

Educators and school administrators have given little consideration to

design, construction or types of equipment most desirable for schools. The developments made in school equipment have come from the industry and not from standards and specifications developed by the educators. It is safe to say that the industry will welcome standards and specifications from the field and will cooperate in prefabricating equipment accordingly.

The School Plant Research Council of the American Council on Education, recognizing the seriousness and complexity of the problem, has undertaken a study designed to offer some solution to the problem, in cooperation with the equipment industry. The School Plant Research Council hopes to develop descriptive technical specifications, along with adequate and suitable accelerated tests, that will determine quality and durability covering the various items of school equipment and that will eliminate most of the serious difficulties now experienced in purchasing equipment.

Two Distinct Specification Studies

The problem is naturally divided into two distinct studies, the first of which is an emergency problem in developing the specifications and suitable tests that will specify equipment by quality groups. Thus, if school authorities wish to purchase first quality equipment, the specification will be used that will definitely eliminate a lesser quality of equipment, or should the purchasing authority wish to buy a lesser quality, an appropriate specification will be available. The second part of the study will involve a canvass of the educational field in determining standards as to types and design of equipment most desirable and suitable for a modern educational program. In developing this part of the problem, the School Plant Research Council contemplates close coordination with the National Council on Schoolhouse Construction which will endeavor to formulate standards as to type and design of school equipment.

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The School Cafeteria

CONDUCTED BY
MARY DeGARMO BRYAN

Cafeteria at Norwalk High



Above: Showing the arrangement of the counter. The salad refrigerator opens from one side into the kitchen and from the other into the serving section.



Above: Plenty of light and air are assured in the dining room located atop Norwalk High School. Murals depicting local scenes add to the appearance.

ETHEL A. MASON

Manager, High School Cafeteria
Norwalk, Conn.

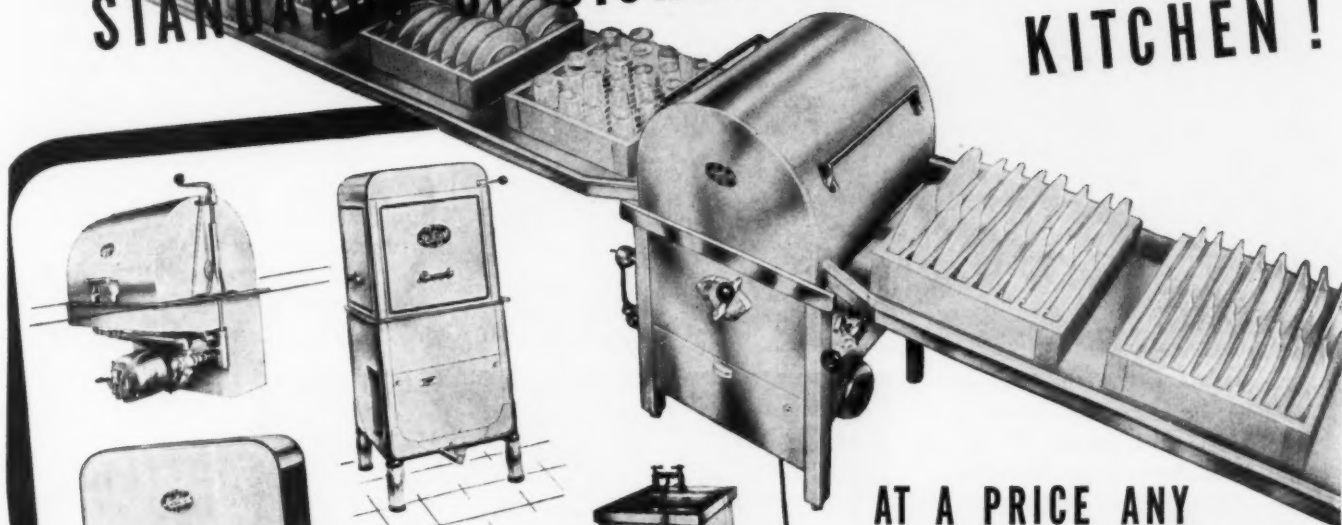
THE cafeteria of the Norwalk High School, Norwalk, Conn., a new building erected at a cost of more than \$900,000 and opened in January 1938, is located on the top floor.

The dining room of this school, which has an enrollment of approximately 1350 pupils, is rectangular and also is used as a study room and for social events. It is equipped with oblong linoleum topped tables seating six and eight. Chairs are sturdy and are provided with a shelf for books. Light is obtained from windows on both ends of the room and from skylights. The room is ventilated with fresh air introduced from the outside and passed through unit heaters; the stale air is taken by another fan and expelled to the roof. The floor is covered with blocks of asphalt tile in a mottled design of cream and rust color. The ceiling is covered with soundproof plaster.

The visitor, on entering the dining room, is immediately impressed with the murals that decorate the walls. These paintings tell the story of the oyster industry for which Norwalk is well known; also, of Calf Pasture Beach and other scenes of local interest. Two drinking fountains of stainless metal, requiring tumblers, are placed in the dining room on the wall adjacent to the serving unit.

The dishwashing unit, which is a part of this area, is partitioned off with walls to the ceiling so as to be entirely separate. This room is equipped with a ceramic tile floor with floor drains. The dishwashing machine of stainless metal is in the center. The tables for clean and soiled dishes are of stainless metal and are fitted with two sinks. Slides

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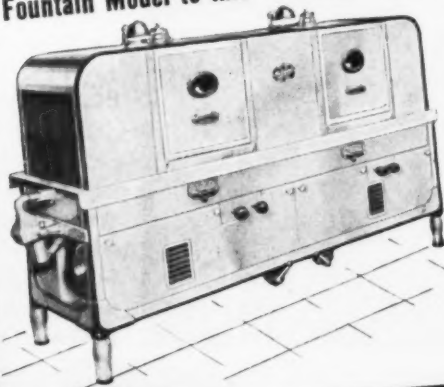
THE HOBART MODEL "LM" (above) now enables thousands of *small but busy kitchens* to enjoy the advantages of *full-capacity, heavy-duty* dishwashing equipment. The surprising capacity-size of this compact unit . . . the simple, single-handle control of wash and rinse . . . the thorough, rapid washing and rinsing action . . . all make the "LM" highly practical for kitchens requiring constant service, with a minimum of supervision.

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Above: One end of the kitchen, used by the baker and the cook. The kitchen has plenty of natural light from large windows.

are placed on two walls at points at which soiled dishes are received. Light is obtained from skylights and ventilation is procured from an exhaust fan in the ceiling. Clean dishes are taken to the service counter on trucks.

The service counter is between the dining room and the kitchen. The front of the counter is ivory enamel with stainless metal trim. The tray slide is of the three bar type, also of stainless metal. All edges of the counter are rounded. Shelves of galvanized steel are placed under the counter for dishes. The back of the steam table section is equipped with doors and shelves for warm dish storage. On the rear of the steam table section is a 6 inch carving board; this keeps the person who is serving from getting too hot.

The counter is arranged in the following order: (1) trays, which are of aluminum treated finish, with the napkins between the trays; (2) boxes, made of stainless metal, for the silver; (3) a section with two glass display shelves for salads and with shelves beneath for sandwiches and bread; (4) the steam table with two flat pans for meat and with insets for vegetables; (5) another section with two glass shelves for desserts and milk, and (6) a coffee urn, used for social functions only. The ice



Left: A close-up view of the baker's table, showing the counter balanced bins and the work table with stainless metal top.

cream box is in the center of the counter at the exit. The cash registers are placed directly opposite the ice cream box. This counter arrangement is duplicated at the other end of the room.

The refrigerator for salads and desserts is located back of the ice cream cabinet and opens from one side into the kitchen and from the other into the serving section.

Members of the faculty use the

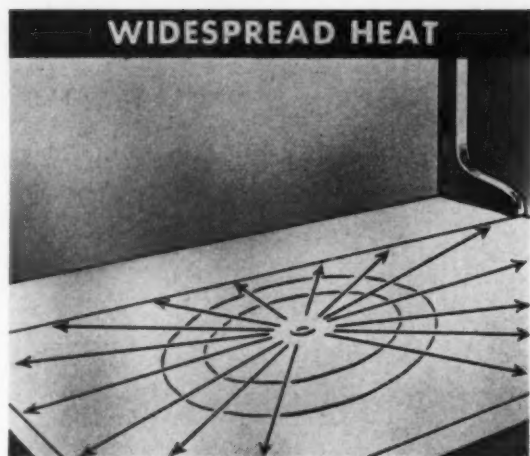
same service counter the pupils use. Coffee and tea are prepared in the teachers' dining room in a glass electric coffee maker. This proves most satisfactory.

The kitchen has plenty of natural light from large well-placed windows and the ventilation is good. The floor is of rust colored ceramic tile and the walls are of plaster painted a cream color. One end of the kitchen is used by the baker and the cook; the other end is for the preparation of sandwiches and salads. The delivery entrance to the freight elevator is next to the vegetable sink.

The kitchen is equipped with a steam jacketed kettle, a two compartment steam cooker, a three section bake oven, two heavy duty ranges butted together as one unit with a continuous top and with two

roasting ovens below, both of which are insulated and equipped with heat control. A warming oven and salamander broiler are located above the stove. These pieces of equipment are grouped under a metal hood provided with lights on the inside and with a ventilating fan that carries off cooking fumes.

Next in line on this wall is the cook's sink, its single compartment made of stainless metal. The cook's



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refrigerator is next to the sink. On the opposite wall is the baker's table. This has tilting bins for flour and sugar, a hard maple top and drawers and a steel shelf above. The mixer is placed adjacent to the baker's table so as to be used by both the cook and the baker.

Next to the mixer is another table with stainless metal top and with a drawer and a galvanized shelf below for pans. Over this table hangs the pot rack, which is fastened to the wall; also a stainless metal shelf.

The piece of equipment next in line is the cook's table, which has a maple top, a raised curb on the back and ends and a galvanized shelf below for pans. A rack for the cook's

knives is placed on the back of this table in the center. A potato peeler is adjacent. Next to the potato peeler is the vegetable sink, a double compartment of stainless metal with two drain boards and a splash back, which protects the walls.

The entrance to the freight elevator is at this point. At this end of the kitchen is the sandwich table of stainless metal equipped with two bread bins and a drawer. A stainless metal shelf hangs on the wall above the table. The slicing machine is placed next to this table. Opposite is the salad table with a stainless metal top and with a drawer and a stainless metal shelf above. The refrigerator for salads and desserts, a utility

table and a portable table, both of stainless metal, are near by.

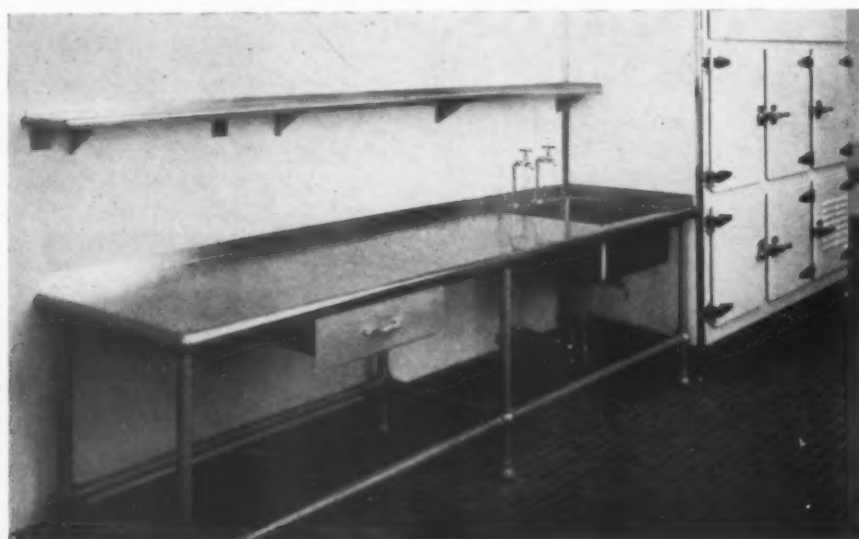
The office of the manager is located at the end of the kitchen providing a full view of the entire area. Next to the manager's office is a closet, with a slop sink, for storage of cleaning tools and supplies. A small storeroom provides space for daily supplies and small equipment.

Ventilation in the kitchen is controlled by an exhaust fan that takes the air from above the various units to the roof. Venetian blinds are used on all the windows of the kitchen and office. Deliveries are made on the ground floor and are sent upstairs on an electrically operated elevator. A telephone and buzzer are located at this point.

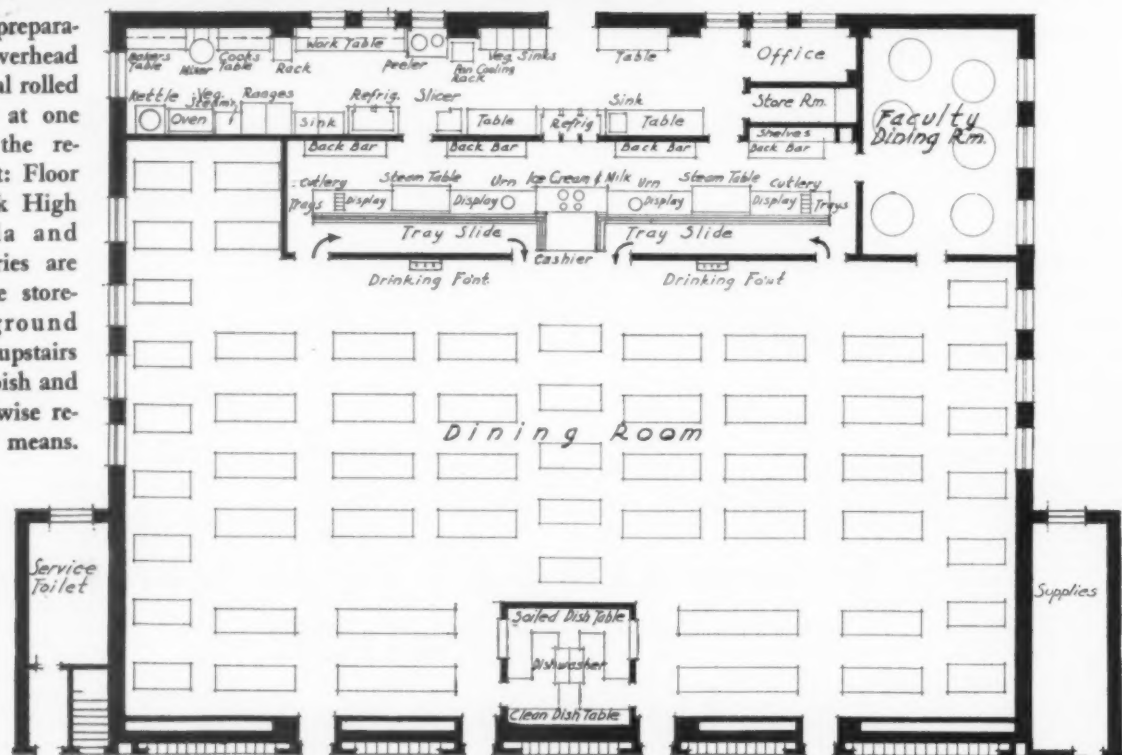
On the ground floor adjacent to the elevator the large storeroom is located. This room is equipped with scales, metal shelving and table, but has no pipes or heat. Rubbish and garbage are taken on the elevator for removal.

The teachers' dining room adjoins the service room and the pupils' dining room. It is well lighted by natural means. The furniture is of walnut, with round tables seating five or six and with Windsor chairs. Murals will be placed on the walls of this room during the coming year.

Employees have a locker room off the main hall; it is equipped with toilets, wash basin and steel lockers.



Above: Salad preparation table has overhead shelf with integral rolled edges and sink at one end adjoining the refrigerator. Right: Floor plan of Norwalk High School cafeteria and kitchen. Deliveries are made to a large storeroom on the ground floor and sent upstairs by elevator. Rubbish and garbage are likewise removed by this means.





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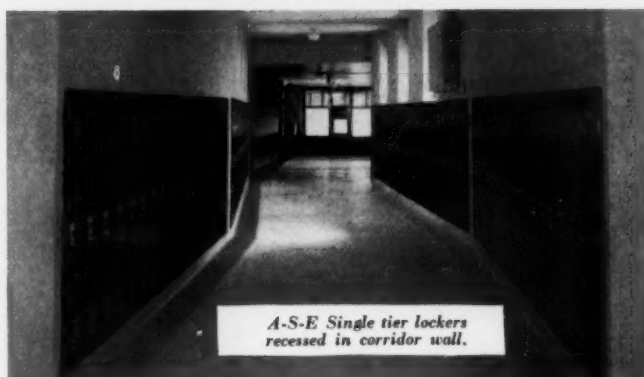
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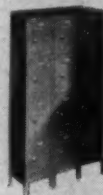
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News in Review

Educational Research Award

Citations for outstanding contributions to educational research recently were announced by the committee on awards of the American Educational Research Association.

In the field of the curriculum, the award was made to J. Wayne Wrightstone for his two studies, "Appraisal of Newer Practices in Selected Public Schools" and "Appraisal of Experimental High School Practices."

"These studies are significant as a pioneering effort to evaluate results of teaching that are not adequately measured by conventional tests and examinations," the committee stated.

For his "scholarly compilation and interpretation of court decisions bearing upon various aspects of the public schools," Newton Edwards of the University of Chicago was given the award in the field of school organization for his study "The Courts and the Public Schools."

In the field of special methods and psychology of the elementary school subjects, the award was given to the co-authors of "Healthy Growth," Martha C. Hardy and Carolyn H. Hofer. Concerning this study, the committee said: "Care in planning, thoroughness of procedure and application of the 'longitudinal' method of research have made this an outstanding study. . . . The findings support the conclusion that the program of health education as planned by the authors was highly successful."

Members of the committee, comprising Carter Alexander, Bess Goodykoontz and Walter S. Monroe, chairman, were assisted by 58 judges.

SUMMER COURSES

School for Custodians

Subjects to be taken up this year at the University of Minnesota summer school for engineers and custodians will be selected partially by those in charge of the course and partially by those in attendance. Sessions will be held June 12 to 16 on the campus at Minneapolis.

The group will not be divided and the subjects will be covered first by a lecture, followed by a conference in which the entire group will take part. Special arrangements will be made for enrollees whose needs are not covered by the subjects taken up in the conference groups. Three specialized courses are being offered: (1) house-keeping and sanitation; (2) heating

and ventilating, and (3) maintenance and management.

Richard R. Price, director of university extension, has assembled a staff of engineers, mechanics and maintenance men both from the university faculty and from other institutions.

Each registrant pays a fee of \$10. The cost of books does not exceed \$2. Good living accommodations may be obtained from \$1 to \$2 per day for the five day session.

French School at McGill

The McGill University French summer school will convene from June 29 to August 9 on the university campus on the slopes of Mount Royal, Montreal. Students are pledged to speak nothing but French. Three lecture courses, elementary, undergraduate and graduate, are offered.

Courses for Administrators

School administrative problems from civic, political and legal angles will be treated in the summer quarter program of the department of education of the University of Chicago.

Presenting courses will be such authorities as George A. Works in the state field; W. C. Reavis, civic relations; Floyd W. Reeves, politics, and Nelson B. Henry, legal aspects.

Doctor Reavis and Paul B. Jacobson, principal of the University High School, will present a course on administration specifically designed for high school principals.

Another course on the organization of the American secondary schools will be offered by Prof. Leonard V. Koos.

In addition, two special conferences for administrative officers will be conducted during the summer. The thirteenth annual Institute for Administrative Officers of Higher Institutions will be held July 12 to 14. The conference of Administrative Officers of Public and Private Schools will be conducted July 17 to 21.

Institute of Democracy

An intensive study of contemporary social problems will begin June 20 on the campus of Northwestern University with the establishment of a new Institute of Democracy. The institute will bring to Evanston ten visiting professors who, with members of the Northwestern University faculty, will form the instructional staff of the institute, which will be in session until August 12. While the institute is primarily intended for graduate stu-

dents in the social sciences, individual courses are open to all persons who can meet the prerequisites.

Thirteen courses will be offered and a group of 24 related courses will be available in the regular summer session. The basic course for the institute will be "Contemporary Problems of Democracies," to be taught by Dr. Arthur N. Holcombe, chairman of the department of government at Harvard University.

Reading Institute at Peabody

George Peabody College for Teachers will sponsor its third annual Reading Laboratory Institute from July 3 to 15 on the campus at Nashville, Tenn.

The program has been organized to interest teachers of all grade levels, administrators, supervisors, directors of reading clinics, teachers of exceptional children and educational clinicians. Speakers will include Leo J. Brueckner, Guy T. Buswell, Louise Farwell Davis, C. E. Manwiller, Lillian Meade and Clifford Woody.

Workshop Personnel Announced

The Workshop in Secondary Education to be held from June 19 to July 21 at the University of Chicago will be directed by Maurice L. Hartung, assistant professor of education at the university and associate director of the evaluation project of the P.E.A.

C. L. Cushman, director of curriculum and research of the Denver public schools; Edgar Dale, associate professor of education and a member of the bureau of educational research at Ohio State University, and Clifford G. Houston, professor of education, University of Colorado, will handle general curriculum problems.

Consultants on general problems of evaluation will be Ralph W. Tyler, chairman of the university department of education, and Genevieve L. Coy, psychologist of the Dalton Schools, New York. There will be consultants on social studies, English, science, mathematics, guidance, reading and visual materials. The enrollment is limited to 180.

Workshop at Mills College

Mills College at Oakland, Calif., this year is sponsoring an Education Workshop for teachers, deans and counselors as a part of the summer session June 25 to August 5. The problems, needs and responsibilities of women in contemporary society will form the area of the study. Dean Esther A. Dayman of Mills will be the coordinating director and the staff will include Dr. Marion Brown, University High School, Oakland; Dr. Douglas Gordon Campbell, University of Chicago; Dr. Lawrence K. Frank, Josiah Macy Jr.



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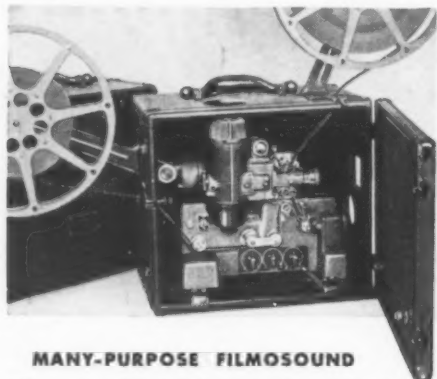
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VISUAL EDUCATION

Silent Films Are Educational

While sound films have largely monopolized the spotlight in recent years, there has been no appreciable lag in the production of silent films. There is virtually no new production of silent film dedicated specifically to entertainment. Silent films have gone "educational."

A significant increase in the production of silent films and the apparent trend to the educational in subject are shown in the recent revision and enlargement of the Bell & Howell rental and sales catalog of 16 mm. silent films. This catalog now lists 365 silent film titles; of these, 58 have been added since the last printing about six months ago.

The new Bell & Howell silent film catalog, as well as the sound film catalog issued by that company, is sent free to users of 16 mm. projectors.

Emphasize Visual Education

Visual education will receive major emphasis in the summer quarter program of the department of education of the University of Chicago, it has been announced.

In this field special courses will be given by Edgar Dale, associate professor of education at Ohio State University; Harvey B. Lemon, professor of physics, and Selby M. Skinner, assistant professor of physical sciences, both of the University of Chicago.

Doctor Dale's course on visual aids will embrace motion pictures and educational principles to be followed in the utilization of visual materials.

Professors Lemon and Skinner will present another phase of visual instruction, a new course for teachers of physics and other sciences in the setting of the university's new "home-made" physics demonstration laboratory. The laboratory contains 253 pieces of apparatus set up to illustrate experiments ranging from those done by Galileo to the latest scientific advances. In essence, the course provides both for laboratory instruction and for instruction on laboratory construction.

Films for the School Screen

Games

Eleventh Olympic Games—Coverage of the 1936 Olympics in Germany including opening ceremonies, finals in gymnastics, track and field events and swimming. 4 reels. 16 mm., silent. For purchase. James H. Potts, University of Pittsburgh.

Jumps and Pole Vault—Slow motion photography demonstrates actual competition in the running high jump, hop, step and jump and the pole vault. The film provides opportunity for detailed study of the varying forms employed by champions. 11 minutes. 16 and 35 mm., sound. For purchase. Erpi Picture Consultants, Inc., 250 West Fifty-Seventh Street, New York.

Weight Events—Demonstrations of the shot put, discus throw, hammer throw and javelin. Slow motion photography is used, together with repetition, to give the student ample opportunity of observing every detail of technic in these events. 11 minutes. 16 and 35 mm., sound. For rent or for purchase. Erpi Picture Consultants, Inc., 250 West Fifty-Seventh Street, New York.

Hannes Schnedier Skiing Technic—A skiing instruction film designed to fulfill the needs of the novice skier,

and to perfect the skill of the intermediate ski runner. Explanation and demonstrations by Benno Rybizka. Normal and slow motion shots provide opportunity for studying the correct execution of all the turns used in the skiing curriculum. Canadian Rockies for a background. 40 minutes. 16 mm., silent. For purchase. Christine Reid, 14 Hawthorn Road, Brookline, Mass.

Batter Up—This is the fourth official sound motion picture to be produced by the American League in cooperation with the Fisher Body Division of General Motors. The film was written and directed by Lew Fonseca, director of promotion for the league, with Ted Husing doing the narration. 38 minutes. 16 mm., sound. Loan film. American League of Professional Baseball Clubs, 310 South Michigan, Chicago.

Tomorrow's Halfback—An inspirational film dealing with modern football and how it is played today. Safety and sportsmanship features are stressed. 11 minutes. 16 mm., sound. For sale or for rent. Walter O. Gutlohn, Inc., 35 West Forty-Fifth Street, New York.

Films in Review

A TRIP TO THE SKY: 16 mm. silent and sound. Rental price: silent, \$2.50; sound, \$3.50. The sound version is the one reviewed. Distributed by Walter O. Gutlohn, 35 West Forty-Fifth Street, New York City; Ideal Pictures Corporation, 28 East Eighth Street, Chicago; Cinema, Inc., 234 Clarendon Street, Boston.

Rating

Age Level: Because of the character of the film, all levels.

Quality of Photography: Good.

Selection of Scenes: Poor, because of the difficulty in determining the locale.

Quality of Narration: Fair as to intelligibility; poor as to accuracy.

The film opens impressionistically with "shots" of the sea and quickly passes to actual views of a telescope in use. We are informed that it is through the use of instruments such as this that we have learned that the earth is not the center of the solar system.

Then come scenes which, from the purely instructional angle, are among the best in the film, by the use of parallax to measure distance, the use of simple triangulation to measure the distance from the earth to the moon.

This film may have considerable value in stimulating interest and in giving certain appreciations. It actually has been used with elementary school children with favorable results. By the same token it would not be of much value in imparting accurate information about the universe or in suggesting how that information is obtained. An exception to the latter statement may be allowed for the work on the measurement of distances, which is described well, if briefly.

The film is guilty of two bad defects. First, many of its statements are not accurate. Second, it lacks clarity as to just where we are supposed to be when the various scenes are viewed. We hop back and forth in the universe with truly bewildering rapidity. Its use would have to be circumscribed with the most meticulous care, lest erroneous impressions result.

The photography is good; many of the shots, which must have been made in miniature, have the beauty of actual scenes. However, the French producers of this film have not managed the musical background well. — *Reviewed by a committee comprising H. EMMETT BROWN, ROSE WYLER, N. ELDERED BINGHAM and F. T. HOWARD, all of Teachers College, Columbia University; F. M. WORRELL, Englewood High School, Englewood, N. J., and HERBERT ZIM, Ethical Culture School, New York City.*

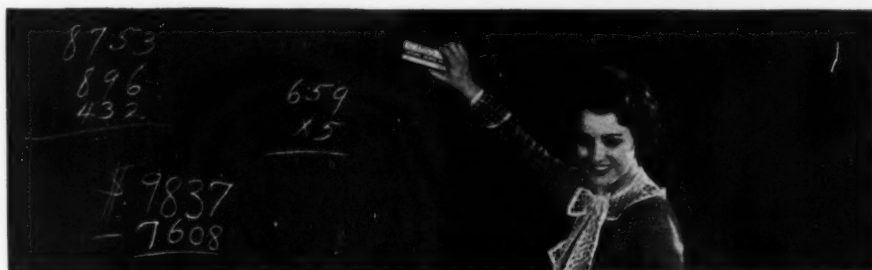
Ninth Visual Education Conference

The DeVry Foundation will sponsor its ninth National Conference on Visual Education and Film Exhibition at the Francis W. Parker School in Chicago from June 19 to 22.

There will be an almost continuous showing of selected industrial and educational films. Among the educators who will appear as headliners on the program are:

Alvin B. Roberts of Gilson, Ill., who has conducted research study on the

status of visual education in Illinois; B. A. Aughinbaugh, director of the state department of visual education, Columbus, Ohio; William G. Hart, director of visual education, Harvey H. Lowry School, Dearborn, Mich.; A. P. Heflin of Lane Technical High School, Chicago; Mrs. Richard M. McClure, president of the Better Films Council of Chicagoland; Prof. L. W. Cochran of the University of Iowa; Mrs. Charles J. Moore, director of the visual instruction bureau, University of Texas, and Dr. James E. Bliss of Western Reserve.



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Midwestern Forum

The first Midwestern Forum on Visual Teaching Aids will convene at the Hotel Morrison in Chicago May 12 and 13.

The preliminary program is divided into general sessions and classroom clinics, opening with a general session on Friday morning. At this session, Donald P. Bean of the University of Chicago press, who is chairman of the forum committee, will explain how to

get the most out of the forum. Fanning Hearon, executive director, Association of School Film Laboratories, Inc., will point out new film sources and tell how to get information about them. Charles F. Hoban Jr. of the American Council on Education Film Project will discuss "Evaluating Visual Materials for Specific Teaching."

The first classroom clinic will convene at 11:30 a. m. on Friday for an organization meeting. It will have three sections, an elementary school

On the Air During May

The following programs of particular interest to school people are arranged by the Columbia Broadcasting System and the National Broadcasting Company. All programs are listed in Eastern Daylight Savings Time. Watch listings for your local outlets.

Daily

12:30-1:15 p.m.—National Farm and Home Hour (NBC Blue).¹

Sunday

10:30-11:00 a.m.—Music and American Youth, programs given by public school children from cities all over the country (NBC Red).

12:30-1:00 p.m.—University of Chicago Round Table (NBC Red).

1:00-2:00 p.m.—Great Plays, masterpieces of the drama (NBC Blue).
May 7—Elizabeth, the Queen, Anderson.

2:00-2:30 p.m.—Americans All, Immigrants All, sponsored by the U. S. Office of Education. Dramatization of the contributions which the successive waves of immigrants have brought to the United States, written by Gilbert Seldes (CBS).

4:30-5:00 p.m.—The World Is Yours, dramatic series sponsored by the Smithsonian Institute (NBC Red).

7:00-7:30 p.m.—The Peoples' Platform, dinner guests of Prof. Lyman Bryson of Columbia University from all walks of life talk over current questions (CBS).

8:00-9:00 p.m.—This Is New York (CBS).

10:30-11:00 p.m.—Headlines and Bylines. Comments on world affairs by H. V. Kaltenborn, Ralph Edwards (CBS).

Monday

2:00-2:30 p.m.—Adventure in Reading (NBC Blue).

3:00-3:45 p.m.—Rochester Civic Orchestra (NBC Blue).

5:30-6:00 p.m.—Adventures in Science, guests interviewed by Watson Davis, director of Science Service. (CBS).

6:00-6:15 p.m.—Science in the News (NBC Red).

7:45-8:00 p.m.—Science on the March (NBC Blue).

10:30-11:00 p.m.—National Radio Forum (NBC Blue).

Tuesday

12:45-1:15 p.m.—Music Makers, conducted by Dr. Joseph E. Maddy. Elementary, 12:45-1:00 p.m.; advanced, 1:00-1:15 p.m. (NBC Red).

1:30-1:45 p.m.—General Federation of Women's Clubs, consumers' program (NBC Red).

2:00-2:30 p.m.—Science Everywhere. Junior science. Elementary, 2:00-2:15 p.m.; advanced, 2:15-2:30 p.m. (NBC Blue).

5:30-6:00 p.m.—March of Games, Nila Mack, director (CBS).

Wednesday

2:00-2:30 p.m.—Your Health, sponsored by the American Medical Association (NBC Blue).²

MOTHERS AND CHILDREN

May 3—Healthier Babies.

May 10—Healthier Mothers.

May 17—The Doctor's Workshop.

May 24—Toddlers, 1939.

USING HEALTH KNOWLEDGE

May 31—Checking Up on Health.

June 7—Vacations—Why and How.

June 14—Never Stop Learning.

June 21—Answering Your Questions.

5:30-5:45 p.m.—So You Want to Be—Possible careers for high school pupils (CBS).

6:00-6:15 p.m.—Our American Schools, dramatizations tracing growth and development of the nation's school system, Belmont Farley, narrator (NBC Red).

9:30-10:00 p.m.—Wings for the Martins. What modern education has to say on the problems of children and youth in "finding their wings." Sponsored by the U. S. Office of Education and the National Congress of Parents and Teachers (NBC Blue).

Thursday

5:30-6:00 p.m.—March of Games (CBS).

9:30-10:30 p.m.—America's Town Meeting of the Air, George V. Denny Jr., moderator (NBC Blue).

Friday

10:45-11:00 p.m.—American Viewpoints program (CBS).

Saturday

10:30-10:45 a.m.—Florence Hale's talks, directed to parents, explaining methods of classroom procedure so that education may continue at home as well as in school (NBC Red).

10:45-11:00 a.m.—The Child Grows Up (NBC Blue).

11:00-12:00 noon—Cincinnati Conservatory of Music. New York Philharmonic Children's Concert alternates on third Saturday of each month (CBS).

11:00-11:30 a.m.—No School Today, a new safety program for children (NBC Red).

11:30 a.m.-12:00 noon—Milestones in the History of Music, Eastman School of Music program (NBC Red).

12:00 noon-12:25 p.m.—American Education Forum. Conducted by Dr. Grayson Kefauver, professor of education, Stanford University (NBC Blue).

May 6—Bennington College.

May 13—Trends in General Education, with Donald Cottrell, Alvin C. Eurich and Doctor Kefauver.

12:00-12:30 p.m.—NBC Music Guild (NBC Red).

6:30-7:00 p.m.—"What Price America," U. S. Department of Interior program presenting the fight to regain natural resources in dramatized form (CBS).

7:30-8:00 p.m.—Americans at Work (CBS).

7:30-7:45 p.m.—Lives of Great Men. Dr. Edward Howard Griggs (NBC Red).

¹Except Sunday.

²Owing to program conflicts, there will be no Chicago broadcast of the network program. Instead, a recording of the program will be broadcast over Station WENR at 8 p.m. each Wednesday.

clinic, high school clinic and a college clinic. The separate clinics will reconvene at 2 o'clock that afternoon for a showing of films and discussion of topics of interest to each division.

Four outstanding visual educators are featured on the banquet program for Friday evening: Edgar Dale, Ohio State University; Ralph Jester, president, American Pictures, Inc.; V. C. Arnsperger, Erpi Picture Consultants, Inc., and Ralph W. Tyler, chairman, department of education, University of Chicago.

On Saturday morning there will be a final session of the three classroom clinics preceding the final general session at 11 a.m. The speaker for the general session will be Earl A. Trager, National Park Service, who will discuss "A Kodachrome Journey to Our National Parks." Three producers of visual materials in the school, Arnold Heflin, Lane Technical High School, Chicago; J. Kay White, principal, Pershing School, Berwyn, Ill., and I. P. Daniel, Lake View High School, Chicago, will show movies, slides and filmstrips, and microslides, respectively.

Weekly Evening Programs

To extend interest in the possibilities of the educational film and to assist teachers in their selection, the Student Council of Teachers College, Columbia University, is sponsoring a weekly evening film program. Emphasis is given to recent releases in order that teachers may become acquainted with the newer material. Represented on these programs are the films of educational film producers, theatrical producers, government and public service agencies and industrial concerns.

Each program is followed by a discussion of the potential values and uses of the films. Critical reviews are prepared and sent to cooperating magazines of which *The Nation's Schools* is one. So far as is possible, these reviews are prepared by members of the faculty or advanced graduate students in whose field the subject matter of the film falls.

New China Film Released

Joris Ivens and John Ferno, who produced "The Spanish Earth," document of the war in Spain, have completed a six reel documentary film of the struggle in China entitled "The 400,000,000." Sponsors of "The 400,000,000" are Dorothy Parker, Luis Rainer, Lillian Hellman, Ernest Hemingway, William Osgood Field, Dudley Nichols and Archibald MacLeish.

"The 400,000,000" is a historic record of the background of the events in China, showing the birth of New China under the leadership of Dr.

Sun Yat Sen, the first beginnings of industrial civilization and the attempted throttling by Japan. The real basis of Chinese resistance is shown and its extent is demonstrated by sequences taken in the remote provinces.

The English commentary was written by Dudley Nichols, Academy Award winner and author of the current hit, "Stagecoach." Frederic March is the narrator.

The film has been announced for release by Garrison Film Distributors, Inc., 1600 Broadway, New York City.

PUBLICATIONS

Children's Book Festival

Munro Leaf, May Lamberton Becker, Mary Gould Davis, Margaret Ernst and Stephen Vincent Benet are the judges who will award two cash prizes of \$250 each in the nation-wide Children's Spring Book Festival, May 7 to 14.

One prize is given for the best book for younger children and the other, for the best book for older children pub-



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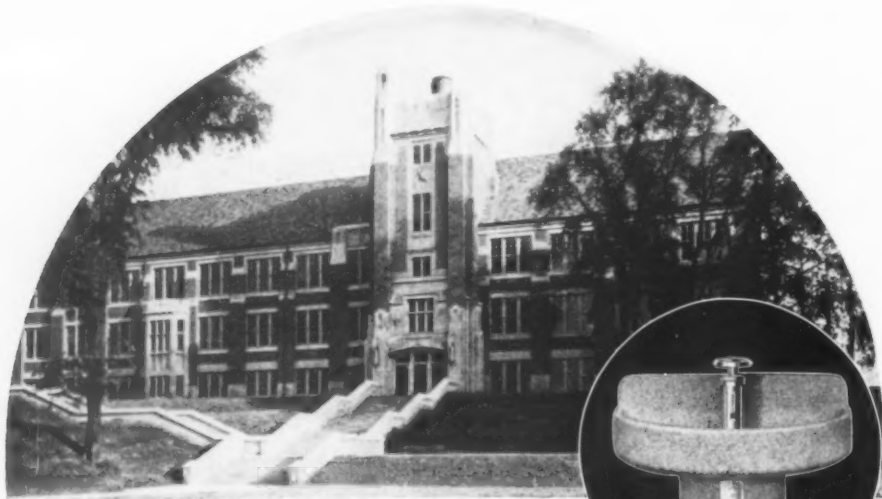
The giving of these two prizes, begun three years ago, was the first organized effort to counteract the practice of publishing too many children's books just before Christmas.

The festival is held in the spring to foster summer reading.

60 Textbooks of 1939

Because educators are showing a steadily increasing desire for well-designed textbooks, the textbook clinic

of the American Institute of Graphic Arts will sponsor an exhibit of textbooks at the New York City public library from May 23 to June 3. The exhibition will consist of 60 books, chosen by a jury of five on a basis of artistic and technical excellence and of suitability, so far as format is concerned, to instructional purposes. The value of the literary content will not be considered. After the opening in New York, the exhibition in duplicate will be sent on tour to various places throughout the United States.



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Among recent Bradley school installations are: Public School, Kirkland Lake, Ont.; State Agriculture College, Colo.; Central High School, Ft. Wayne, Ind.; Fordson H. S., Dearborn, Mich.; Cornell University; Rogue River H. S., Grants Pass, Ore.; Georgia School of Technology; State Training School, Boonville, Md.; Tome Jr. School, Port Deposit, Md.; Central School, Orange, N. J.; A & M College, Okla.; Will Rogers H. S., Tulsa, Okla.; State Mining School, Platteville, Wis.; Mastick School, Alameda, Calif.

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FINANCE

Illinois Salary Figures

One-third of the elementary teachers in Illinois receive less than \$800 per year, it was revealed by the Illinois Education Association, in a statement given in connection with measures now pending in the legislature that would set a minimum wage level of \$800 per year. The proposed minimum wage measure would affect 93 Cook County elementary teachers, it was said. The association contends that the state now guarantees a minimum support level sufficiently high no longer to warrant teachers' salaries of \$500 to \$700.

RADIO

Listens Three Hours per Day

The typical Western New York school pupil listens to the radio for three hours a day, seven days a week.

This is one of the conclusions drawn from a survey conducted among the children of the four upper elementary grades at Eggertsville, N. Y. The report also showed the following other conclusions:

1. The average child listens to six programs regularly and five occasionally.
2. He has a "fair chance" to choose his own program without interference, because there are probably two sets in his home.
3. Teachers and parents have little direct influence on a child's choice of programs.
4. The typical child frequently eats his meals and does his homework to the accompaniment of a radio program.
5. He is influenced by the advertising on programs and frequently reacts to it by sending for free premiums.

However, movies still hold a strong attraction for children, the report evidences, because 85 per cent prefer motion pictures to radio programs. Other preferences that come before the radio are play, school, eating, homework, going downtown and talking to parents. In grades 3, 4, 5 and 6 of the Eggertsville school, 70 per cent of the pupils preferred going to school to listening to the radio. Two-thirds of them would rather go downtown. The survey also disclosed that only slightly more than 50 per cent would rather talk to their families than listen to broadcasts and about the same number would rather play outdoors.

Tenth Institute at Ohio State

The Institute for Education by Radio, held annually at Ohio State University



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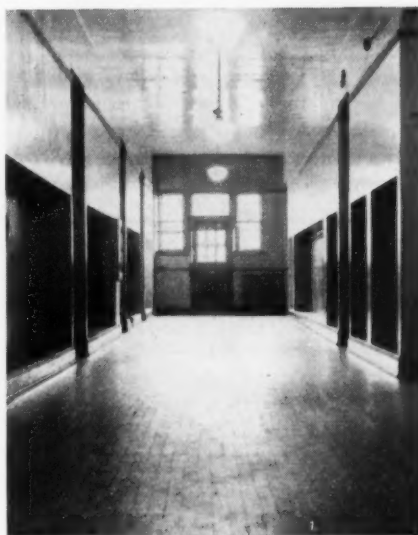
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since 1930, reaches its tenth year in the conferences set for May 1 to 3. Emphasis this year will be on small working groups—work-study groups, section meetings and round tables. As in the past, the institute will be devoted chiefly to a consideration of the technics of education by radio.

The opening session on May 1 will be given to a round table on "The Place of Radio in a Democracy," by members of the faculty of the University of Chicago, conducted after the manner of that institution's broadcasts.

Two afternoons, May 1 and 2, will be devoted to work-study groups, under the following topics: agricultural broadcasts, school broadcasts, radio courses in colleges and universities, research in radio education, educational use of facsimile, ultra-high frequency and recording, broadcasts for general education and broadcasting by community service organizations.

Sections on special problems are listed for the opening night, May 1, with the following leaders: Carl Menzer, University of Iowa; Neville Miller, National Association of Broadcasters; Harold W. Kent, Chicago board of education; Lyman Bryson, adult education board, C.B.S., and Alton O'Steen, Evaluation of School Broadcasts, Ohio State University.

Pupils Broadcast the News

At regular intervals on Tuesdays and Fridays, news flashes are broadcast over the public address system at Robbinsdale High School, Robbinsdale, Minn. There are two journalism pupils in charge each day. They visit each teacher before the broadcast to garner news items about classes, coming events and personal activities.

MEETINGS

North Central Association

Fifty-nine high schools and 10 colleges and universities were added to the accredited list of the North Central Association of Colleges and Secondary Schools at the association's forty-fourth annual convention held in Chicago, March 29 to April 1.

The association's commission took action to drop 13 high schools and to permit withdrawal of seven high schools, bringing the new total of accredited high schools in the 20 states covered by the association up to 2860.

Dr. George A. Works, dean of the University of Chicago, was elected president of the association. New vice presidents are Dean W. E. Peik of the University of Minnesota and DeWitt

S. Morgan, superintendent of schools, Indianapolis. Paul A. Rehms, principal of the high school at Grosse Pointe, Mich., was made a member of the executive committee. Some 2000 persons attended the sessions.

Dr. G. W. Rosenlof of the University of Nebraska, secretary of the commission on secondary schools, reported that half of the high schools in the North Central area have increased the pay of instructors and principals within the last year.

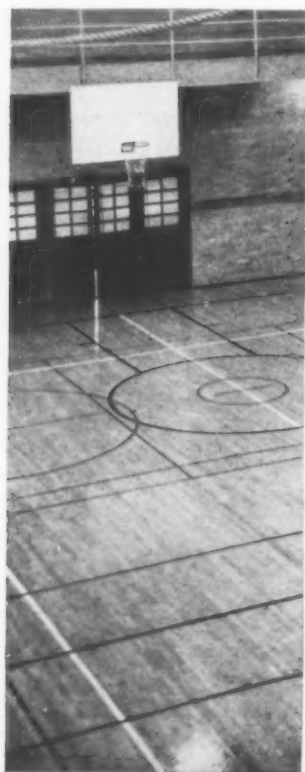
Administration of federal grants to students through more than 26,000 educational institutions was in force at the end of 1938, according to Dr. Charles Hubbard Judd, present director of the N.Y.A. program. Of the 368,921 students receiving aid, 256,844 are high school pupils.

Criticism of the "arbitrary accrediting methods" of the association was voiced by Eugene B. Elliott, superintendent of public instruction for Michigan.

In place of arbitrary standards, Doctor Elliott made the following recommendations:

1. Schools should derive the objectives for their programs from community needs and conditions rather than from extrinsic standards.

2. Schools should be encouraged to develop new procedures of teaching and



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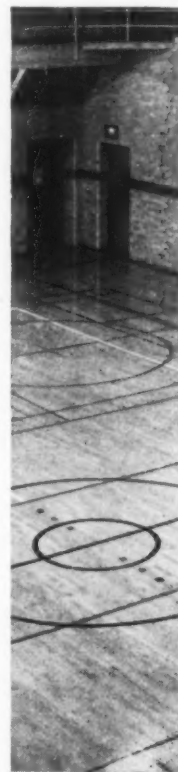
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new curricular experiences for pupils.

3. Schools should be encouraged to develop comprehensive evaluation programs based on the growth and development of the individual student.

President F. P. Gaines of Washington and Lee University declared that the schools must not be wholly academic and objective in treating democracy *versus* the "isms." It is worse than inadequate treatment if we coolly set up for impersonal appraisal the various theories of organized society, signifying the points of strength and weakness in each system with a sort of scholarly neutrality.

"Debunking of our great personages, sneering at national motives and pinpricking national ideals are poor endowments to offer youth already facing world conditions that induce pessimism, fatalism and even utter despair," he declared.

White House Conference

The first session of the White House Conference on Children in a Democracy attracted educational leaders and child welfare experts from all parts of the country to the White House on April 26. Secretary of Labor Frances Perkins was chairman of the conference and Katherine F. Lenroot, children's bureau chief, U. S. Department

of Labor, was executive secretary. President Roosevelt acted as honorary chairman.

In the invitations, Miss Perkins pointed out that the President had called the conference "because of his conviction that a society founded upon democratic principles finds both its aim and its security in the happiness and well-being of its people and especially its children."

Members attending the conference were asked "to develop practical suggestions as to ways in which we in the United States may give greater security to childhood and a larger measure of opportunity to youth."

Another conclave is expected to be held early in 1940.

Food Service Directors

The Conference of Food Service Directors will hold its fifth annual meeting in Baltimore, November 2 to 4, at the Lord Baltimore Hotel.

Registration will begin Thursday evening. The tentative program for Friday afternoon and Saturday will be devoted to discussions and studies on menu making, including the plate lunch; feeding children at school; educating the public in a commercial cafeteria to select food; lunch problems in rural and consolidated schools; the

home economics teacher and the school lunch; a study of fish and fish products; cost control; changing the size of recipes and maintaining quality; equipment and layouts; financial reports; personnel, and recent findings in nutrition.

Those in charge of small cafeterias and lunchrooms directed by the home economics teacher will find this conference of special interest.

Members of the Maryland Dietetic Association, the Maryland Home Economics Association and the Maryland Restaurant Association are working in conjunction with the conference in planning the program.

Constance Hart, Rochester, N. Y., is general chairman; Mary Faulkner, Baltimore department of education, is the local chairman.

A.A.A.S. Education Section

The section on education of the American Association for the Advancement of Science will hold sessions June 23 and 24 when the association holds its summer meeting in Milwaukee. Major theme of the section will be the education of the emotions, which will include the entire area of mental hygiene as it is affected by the educational process. There will be a joint meeting with the section on psychology.

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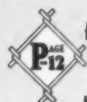
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N.E.A. Outlines Program

"The Responsibilities of Our Profession" is the keynote for the program of the N.E.A. which is convening from July 2 to 6 in San Francisco for its annual meeting.

Following vespers and a preliminary meeting on Sunday, July 2, the convention will open on Monday morning with the first general session at which California and San Francisco officials will welcome delegates. At this session President Reuben T. Shaw will deliver his presidential address.

On Monday evening the association will hold its eleventh life membership dinner with Caroline S. Woodruff, past president, as speaker. Miss Woodruff will discuss "Development of Teacher Education." Honor guests will be Mrs. Susan M. Dorsey, honorary president of the N.E.A., and Dr. Ellwood P. Cubberley, dean emeritus, Stanford University School of Education.

On Tuesday morning there will be assemblies dealing with radio education; "Intelligence—Its Nature and Nurture" under direction of George D. Stoddard of the University of Iowa, and problems of present day youth.

At the third general session on Tuesday evening there will be discussions of unAmerican activities.

The Wednesday morning session will be devoted to discussion groups. Edwin G. Conklin of the American Philosophical Society will discuss "The Wonders of Science" at the fourth general session on Wednesday evening.

Thursday morning there will be assemblies regarding publications and program of the Educational Policies Commission, relations with Pan-American countries, and uses of visual education under the direction of Mark A. May, director, Institute of Human Relations, Yale University.

At the fifth general session on Thursday evening, Will Hays of the motion picture producers will be the speaker.

TRANSPORTATION

Set School Bus Standards

Representatives of state departments of education met with representatives of school bus manufacturers in New York for a week's conference on school bus standards. Suggested standards from the current survey of public school bus transportation in the United States, which is being conducted by Teachers College, Columbia University, formed the basis of the discussions which were attended by representatives of 48 states. New standards have been approved by

this national group with the expectation that they will be incorporated by each representative in his state regulations.

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The Detroit public schools employ 38 buses, accommodating 30 children each, for transporting physically handicapped children to the city's schools for the crippled. In the thirteen years of their operation, there has not been a fatality, although the buses travel approximately 350,000 miles during the school year, transporting 500,000 passengers. While the buses are owned by the board of education, the contract for their operation and maintenance is in the hands of the Detroit department of street railways.

Driver Training Institute

The University of Denver will conduct a one week Driver Training Institute this summer as a part of its program of safety education and driver training course for teachers. The institute will include an analysis of accidents and methods of accident prevention; significance of rules, regulations and courtesy; tests for the safe driver; teaching the essential knowledge of automobile mechanics and practical automobile driving.

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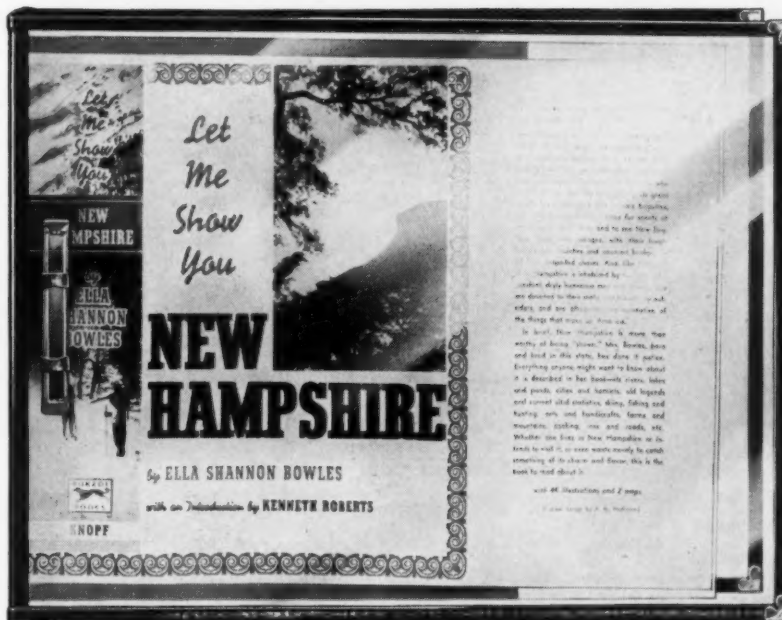
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NAMES IN NEWS

Superintendents

CHARLES E. GREENE became superintendent of schools in Denver when DR. ALEXANDER J. STODDARD went to Philadelphia last month to assume the post of superintendent of schools. The appointment of Mr. Greene, assistant superintendent in charge of high schools, is for an indefinite period at a salary of \$7500. Doctor Stoddard became superintendent Sept. 1, 1937, at a salary of \$12,500 and was given a five year contract from which he was released by the board of education so he might take the Philadelphia superintendency.

I. E. STUTSMAN, former superintendent at St. Joseph, Mo., has assumed his new duties as superintendent at San Antonio, Tex., succeeding J. C. COCHRAN, who resigned last summer.

J. E. HOLMES has been reelected superintendent at Spring Lake, Mich., for the seventeenth year.

CARL HICKS will begin a one year term as superintendent of schools at Catlettsburg, Ky., next fall. He will succeed JAMES T. MIRACLE, who resigned to accept a post at Georgetown, Ky. Mr. Hicks has been associated

with Catlettsburg schools for the last twelve years.

GEORGE WALKOTTEN, assistant superintendent of schools, Kalamazoo, Mich., has been elected superintendent at Albion, Mich., succeeding DON HARRINGTON, who is retiring June 30 after serving as Albion school head since 1919.

W. E. GANN was named superintendent of schools at Texarkana, Ark., to succeed P. N. BRAGG.

MARVIN B. LOVEYS has been named head of Schoharie Central School, Schoharie, N. Y., for the coming year.

JEROME J. WHEELER, director of Industrial High School, Dunkirk, N. Y., was named superintendent of the Dunkirk school system recently. Mr. Wheeler was one of 19 candidates who sought the position following the resignation of FREDERICK R. DARLING, which becomes effective July 1.

HAROLD PACKWOOD of Decatur, Neb., has been elected head of the school system at Hartington, Neb., to succeed T. S. ROSEN, who resigned five weeks ago.

E. T. MILLER has been reelected superintendent of schools at Hannibal, Mo. He first became superintendent at Hannibal in 1931.

E. T. RIDENOUR, principal of Pemberville High School, Pemberville,

Ohio, has been promoted to the superintendent's post to fill the vacancy created by the death of C. E. DOWNING.

GUY B. RHODES, principal of the high school at Marshall, N. C., has been elected superintendent of schools, Madison County, North Carolina, for a two year term beginning July 1.

NUNLEY H. STONE, principal at Superior, Ariz., has been elected superintendent of schools at Coolidge, Ariz.

D. D. KAROW, principal of Lincoln High School, was chosen superintendent of schools, Lake City, Minn., recently to succeed W. A. ANDREWS, resigned.

HULDA COLEMAN has been appointed superintendent of schools, Lowndes County, Alabama, to fill her father's unexpired term, ending in 1941. J. A. COLEMAN resigned because of ill health.

BERTEN B. BEAN has been appointed associate superintendent of schools in charge of elementary grades in Buffalo, N. Y., to succeed CHARLES P. ALVORD, who retired in January after serving forty-three years in the Buffalo schools. Mr. Bean had been director of the higher elementary grades.

MILTON GARRISON has been reelected superintendent of schools at Milan, Mo., for a two year term.

KENNETH NELSON of Prescott, Mich., will succeed C. E. Waite, resigned, as

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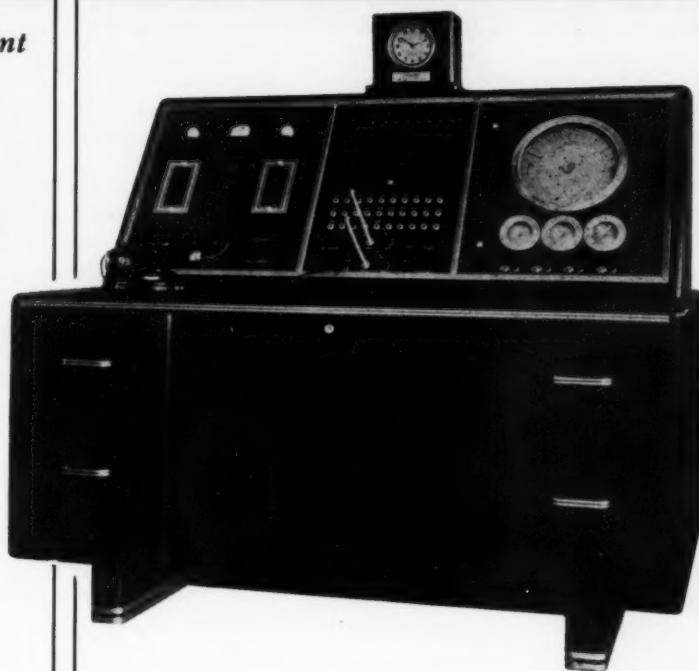
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superintendent of schools at New Lothrop, Mich.

DEWITT WALLER, superintendent of schools, Enid, Okla., has been appointed to membership on the Oklahoma State Board of Education.

CHARLES B. PARK, for the last nine years superintendent of schools at Reading, Mich., has been appointed superintendent at Mount Pleasant, Mich., to succeed the late GEORGE E. GANIARD.

ARTHUR A. KAECHLE, principal of the high school at Allegan, Mich., for two years, will become superintendent at Allegan at the close of the present school year.

MARTIN HEIFER, principal of the high school at Massena, N. Y., has been appointed superintendent of schools at Massena.

ERNEST H. BURDICK of Middletown, FLOYD HURLBUT of Bay Shore, BART C. VAN INGEN of Kingston and WARREN E. MILES of Rock City Falls are four New York State school superintendents who are resigning in June.

Principals

W. F. SHELTON of Linden, Tenn., has been elected principal of Erin High School, Erin, Tenn.

BYRON M. HERRINGTON, a teacher on the staff of the State Institute of Applied Agriculture at Farmingdale, Long

Island, N. Y., will succeed ROWLAND H. ROSS, resigned, as principal at Cambridge, N. Y.

CLYDE L. HURLBUT, principal at Delevan, N. Y., will be the new principal at East Bloomfield, N. Y., beginning in September.

JOHN W. BROWN was elected principal of the Jackson County Central High School at Gainsboro, Tenn., recently.

JOSEPH C. THOMPSON, principal at Willard Elementary School, Chicago, has been appointed principal of Englewood High School. Three other elementary principals appointed to high school principalships are: ALBERT BAUERSFELD, Schurz High School; MAY C. ALLEN, Kelly High School, and JAMES H. SMITH, Fenger High School.

GEORGE H. GENTRY has been elected principal of Temple High School, Temple, Tex., to take office September 1.

WAYNE BLOUGH has been promoted to the principalship of Sandusky High School, Sandusky, Ohio.

ARTHUR L. RANKIN has been appointed principal of the Red Bank Junior High School, Chattanooga, Tenn.

JAMES E. OLD JR., who has been assistant principal at Blair Junior High School, Norfolk, Va., since 1929, was

elected assistant principal of Maury High School, Norfolk, recently. He will succeed LEMUEL F. GAMES, who recently was elected principal of the new junior-senior high school under construction.

EUGENE F. CONANT, member of the science staff at Gloversville High School, Gloversville, N. Y., is to be principal of the new Mayfield Centralized School, which is to open in the village of Mayfield, N. Y., in September.

CLOYCE E. BOOHER, science teacher, will succeed B. R. DUCKWORTH as principal of McClain High School, Greenfield, Ohio, when Mr. Duckworth assumes the superintendency of the Greenfield schools at the close of the school year.

WEBSTER P. SULLIVAN, for the last ten years a member of the faculty of Blair Junior High School, Norfolk, Va., was appointed assistant principal of the school recently.

The Rev. BASIL A. HANEBURG has been named principal of Elder High School, Price Hill, Cincinnati, to replace the late Rev. FRANCIS J. BREDESTEGE.

J. ARDEN WOODALL has been named supervising principal of Hammondsport Union Free School, Hammondsport, N. Y. Other new appointments



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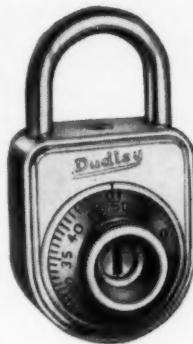
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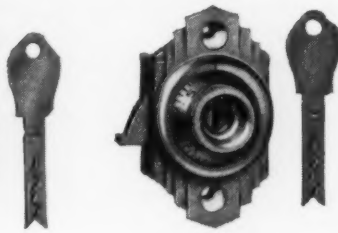
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to principalships and vice principalships in New York State are: C. B. SHEELEY, principal at Hurleyville; ROBERT ROBINSON, vice principal at Wallkill; STEWARD W. LAY, principal at Madrid; WILLET ALBRO, principal at Rushford; J. DONALD YOUMANS, principal at Cape Vincent; EDWARD A. BURKE, principal at Central High School at South Kortright; WALTER S. WILSON, principal at Massena; Jerome Shaver, supervising principal of the Nanticoke Valley Central School District, Nanticoke.

GORDON F. DEPEW, vice principal of the Dundee Central School, Dundee, N. Y., has accepted the principalship of the South Otselic Central School, South Otselic, N. Y.

Miscellaneous

MILTON E. LOOMIS has succeeded DR. HARLAN H. HORNER, retired, as associate commissioner of education in New York State.

DR. C. S. MARSH, vice president of the American Council on Education, has succeeded DR. GEORGE F. ZOOK as representative of that organization on the National Committee on Education by Radio.

SUPT. JOHN S. PAGE of Howell, Mich., was elected president of the Michigan Education Association at the annual meeting of the representative

assembly. EARL R. LAING, principal of the Burt School, Detroit, SUPT. B. C. SHANKLAND of Cadillac and LOUISA DURHAM, principal, Lakeview Junior High School, Battle Creek, were re-elected for three year terms on the board. The new member elected to the board is THOMAS A. BABCOCK of Mount Clemens High School, Mount Clemens. JOHN ACKERMAN of Flint, A. B. HAIST of Saginaw and GROVER STOUT of Detroit were reelected to the public relations commission. The new member of the commission is LOUIS ROBERTS, a teacher at Zeeland.

In the Colleges

DR. ARTHUR HOLLY COMPTON, University of Chicago physicist and Nobel prize winner, has been offered the presidency of Ohio State University at a reputed salary of \$15,000. Doctor Compton has asked university trustees for time to consider the proposal.

M. L. DARSIE has been named dean of the newly created school of education at the University of California. FRED W. COZENS was appointed dean of the college of applied arts. Both appointments are on the Los Angeles campus and will become effective July 1.

PRESIDENT ROBERT M. HUTCHINS of the University of Chicago is said to have declined an appointment to chair-

manship of the Securities and Exchange Commission, following a visit to the little White House at Warm Springs, Ga., with PRESIDENT FRANKLIN D. ROOSEVELT. It was reported that President Hutchins wished to take only a year's leave of absence to accept the post, while President Roosevelt wanted him to resign the university post, which he declined to do.

DR. OTTO H. VOELKER has been appointed acting principal of the State Normal School at Potsdam, N. Y., until June 30. MARION W. LONGMAN, Newburgh, N. Y., has been appointed director of teacher training to succeed Doctor Voelker.

FRANK PROUT, who became president of Bowling Green University April 1, was succeeded as superintendent of schools at Sandusky, Ohio, by KARL WHINNEY, Sandusky high school principal.

DR. LLOYD P. YOUNG has been named president of Keene Normal School, Boston.

DR. CONWAY BOATMAN, a native of Mississippi, was inaugurated as president of Union College, Barbourville, Ky., recently.

DR. J. HERSCHEL COFFIN, professor of psychology at Whittier College, Whittier, Calif., has been appointed director of education of both Whittier



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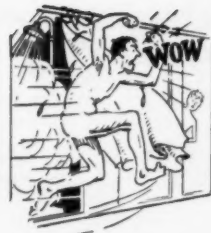
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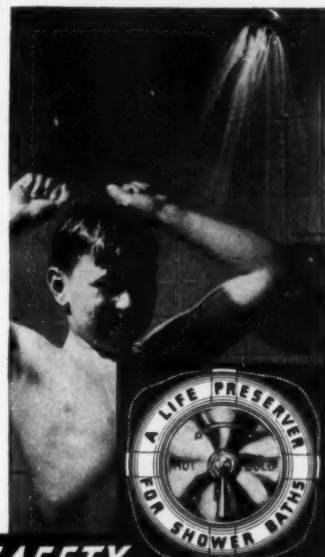
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DR. RAYMOND F. McLAIN, president of Eureka College, Eureka, Ill., has been elected president of Transylvania College, Lexington, Ky. He will succeed Dr. R. H. CROSSFIELD, acting president, on June 6.

Retirements and Resignations

CHARLES A. HATHAWAY, master of Taunton High School, Taunton, Mass., will retire at the close of school in June, completing forty-six years in teaching service to that city.

JAMES H. HARRIS, superintendent of schools, Pontiac, Mich., for eighteen years, has notified the board of education that he wishes to retire at the close of the present school year in June. Mr. Harris is 73 years old. His resignation was accepted with regret by the board of education.

HENRY P. MILLER, principal of the Atlantic City High School, Atlantic City, N. J., for forty-three years, will retire September 1. CHARLES R. HOLLENBACH, assistant principal, has been named to succeed Mr. Miller.

GEORGE M. GREEN, principal of Inglewood High School and superintendent of the Inglewood Union High School District, Inglewood, Calif., will close

his forty-one year teaching career July 1.

B. R. BOWDEN will resign as superintendent of schools at Morris, Ill., at the end of the school year.

RONALD R. SHELTERS has resigned the superintendency at Watervliet, Mich., to enter the University of Michigan in June to work toward the Ph.D. degree. HAROLD CROCKER, high school principal, was named to succeed him.

CHARLES F. PRIOR, superintendent at Fairhaven, Mass., since 1912, except during 1918 when he was in war work, plans to retire from service next September 1.

WILLARD H. SMITH, submaster at Laconia High School, Laconia, N. H., has received appointment as first headmaster of Tilton High School, Tilton, N. H., when it opens next September.

J. BENJAMIN DRAKE, who has been in charge of the modern language department, will succeed ADRIAN H. ONDERDONK as headmaster of St. James' School near Hagerstown, Md., when he retires at the close of the school year.

Deaths

CARL O. BENNER, for thirteen years superintendent at Coatesville, Pa., died recently at the age of 57 years.

ROBERT HUNTER EARLEY, principal of Lyman Hall High School, Walling-

ford, Conn., since 1918, died at his home at the age of 52 years on March 30.

DR. CHURCHILL G. CHAMBERLAYNE, headmaster of St. Christopher's School, Westhampton, Va., died recently at his home.

CHARLES E. DOWNING, 33, superintendent of schools at Pemberville, Ohio, for the last five years, died recently of pneumonia.

WILLIAM N. NUNN, superintendent of schools at Buford, Ga., died of pneumonia in an Atlanta hospital at the age of 69 years.

W. B. HAYES, superintendent of schools at Newcomerstown, Ohio, since 1920, died of cerebral hemorrhage at his home.

GEORGE O. AVKROYD, 32, headmaster of the Raymond Riordon School at Highland, N. Y., died following an illness of four days.

EUGENE HOWARD MCGILL, president of Allen University at Columbia, S. C., died recently in the Johns Hopkins Hospital in Baltimore after undergoing an operation. Doctor McGill was 51 years of age and had directed the Negro university since 1937.

DR. CHARLES B. FAGER JR., principal of William Penn High School, Harrisburg, Pa., died suddenly of a heart attack at his home.



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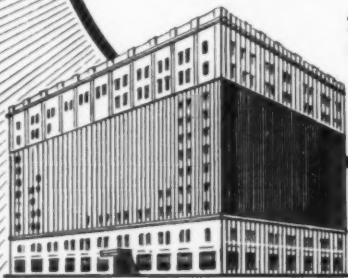
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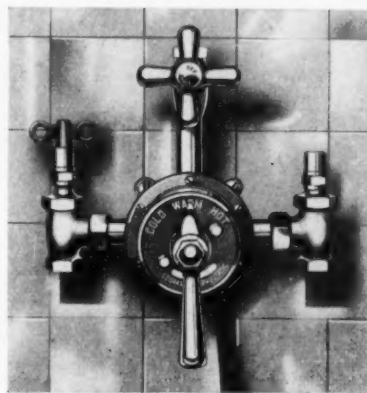
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THE BOOKSHELF

REASON. Edited by George P. Adams, J. Loewenberg and Stephen C. Pepper. Berkeley, Calif.: University of California Press, 1939. Pp. 228. \$2.25.

A symposium by six philosophers and one physicist on reason, published as volume 21 of the University of California Publications in Philosophy.

NO VICTORY FOR THE SOLDIER. By James Hill. New York: Doubleday, Doran & Company, 1939. \$2.50.

Story of a master artist who found only defeat in his struggle with life, starting with England and ending with Spain.

COOPERATION. Principles and Practices. Eleventh Yearbook. The Department of Supervisors and Directors of Instruction. Washington, D. C.: National Education Association, 1938. Pp. ix+244.

Notable contribution to the rapidly increasing literature in democratic functioning. This yearbook is devoted to cooperation and adds considerably to our knowledge of this much discussed but little practiced activity. It indicates

the slow and laborious path through which democratic progress must be made. Decidedly worth serious study.

THE SHIFTING OF FEDERAL TAXES AND ITS IMPLICATIONS FOR THE PUBLIC SCHOOL. By Leslie L. Chisholm. Madison, Wis.: The Journal of Experimental Education, 1939. Pp. 84.

New approach to the question of need for continuing and expanding aid to public education within the states. Shows effect of greatly increased federal taxation upon the states in terms of their total revenue possibilities. Worth careful reading.

THE EXTENT OF EQUALIZATION SECURED THROUGH STATE SCHOOL FUNDS. By Newton Edwards and Herman G. Richey. Staff Study No. 6. Prepared for the Advisory Committee on Education. Washington, D. C.: U. S. Government Printing Office, 1938. Pp. 55. \$0.15 (Paper Cover).

Equalization plans for public education have been provided in less than one-third of the states with the possible implication (not stressed by the authors) that the first step in equaliza-

tion should be some effort on the part of the states to recognize and make all possible provision to solve this problem.

THE IMPLICATIONS OF RESEARCH FOR THE CLASSROOM TEACHER. Joint Yearbook of the American Educational Research Association and the Department of Classroom Teachers. Washington, D. C.: National Education Association, 1939. Pp. 318. \$1 (Paper Cover).

Significant research findings have been brought together in readable form for the benefit of the classroom teacher.

ALCOHOL IN MODERATION AND EXCESS. By Drs. J. A. Waddell and H. B. Haag. Richmond, Va.: The William Byrd Press, Inc., 1938. Pp. 184. \$1.

Most scientific treatise yet produced that seeks objectively to show the effects of alcohol upon the human body. Devoid of propaganda; completely objective. Highly recommended for serious reading by teachers.

THE ADMINISTRATION OF PUPIL TRANSPORTATION. By Ward G. Reeder. Columbus, Ohio: The Educators' Press, 1939. Pp. 200. \$2.50. (Supplementary Manual.)

Growth in scope and importance of pupil transportation is indicated by this first text on motor bus administration and manual for motor bus drivers.

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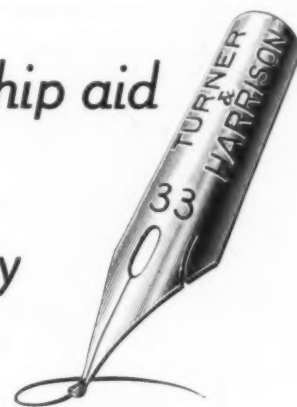
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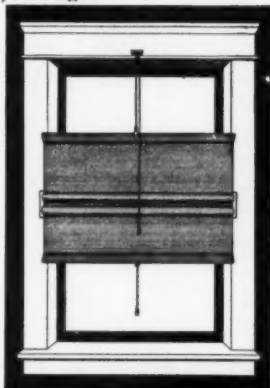


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New York Chicago San Francisco Boston
Toronto London Sydney

MEASUREMENT. By William A. McCall. New York: The Macmillan Company, 1939. Pp. xv+535. \$4.

Noted earlier contributor to the scientific method in education presents a thorough revision of an earlier contribution in this field.

SCIENCE EXPERIENCES WITH INEXPENSIVE EQUIPMENT. By Carleton John Lynde. Scranton, Pa.: International Textbook Company, 1939. Pp. xiii+258. \$1.60.

Should appeal to all secondary school pupils who are interested in scientific experimentation. Practical and simple collateral reference in science.

THE LITERACY OF THE LAITY IN THE MIDDLE AGES. By James Westfall Thompson. Volume 9 of the University of California Publications in Education. Berkeley, Calif.: University of California Press, 1939. Pp. vi+198. \$2.

A thorough and scholarly contribution to the history of medieval education in Germany, Italy, France and England.

THE KNACK OF SELLING YOURSELF. By James T. Mangan. Chicago: The Dartnell Corporation, 1938. Pp. 234. \$2.50.

The secrets of the supersalesman written with the "brutal frankness of a blood relative." There may be places

outside the school where this book is valuable.

PRINCIPLES AND METHODS OF DISTRIBUTING FEDERAL AID FOR EDUCATION. By Paul R. Mort, Eugene S. Lawler and Associates. Staff Study No. 5. Prepared for the Advisory Committee on Education. Washington, D. C.: U. S. Government Printing Office, 1939. Pp. ix+99. \$0.20 (Paper Cover).

Description of the principles and methods of distributing federal aid for education as presented to the Advisory Committee on Education.

Just Off the Press

THE NEW WORK-PLAY BOOKS. By Arthur I. Gates, Miriam B. Huber and Celeste C. Peardon. A complete primary unit including five basal readers, three optional readers, four preparatory books and six manuals. New York: The Macmillan Company, 1939.

FREEDOM THROUGH EDUCATION. By Lotus Delta Coffman. Minneapolis: University of Minnesota, 1939. Pp. 56.

OUR LIFE TODAY. By Francis L. Bacon and Edward A. Krug. Boston: Little, Brown and Company, 1939. Pp. xxii+657. \$1.76.

JUDGMENT TEST ON SAFE DRIVING PRACTICES. By Ammon Swope. Bloomington, Ill.: McKnight & McKnight. Pp. 8. (Paper Cover.)

ADVENTURING IN ART. By Kathryn Dean Lee. New York: D. Appleton-Century Company, Inc., 1939. Pp. x+224. \$1.68.

THICKER THAN WATER. Stories of Family Life. Edited by W. Robert Wunsch and Edna Albers. New York: D. Appleton-Century Company, 1939. Pp. xvi+359. \$1.20.

SEEING OUR COUNTRY. By Walter B. Pitkin and Harold F. Hughes. New York: The Macmillan Company, 1939. Pp. vii+386. \$1.60.

FARM MANAGEMENT. By Robert R. Hudelson. New York: The Macmillan Company, 1939. Pp. x+396. \$1.80.

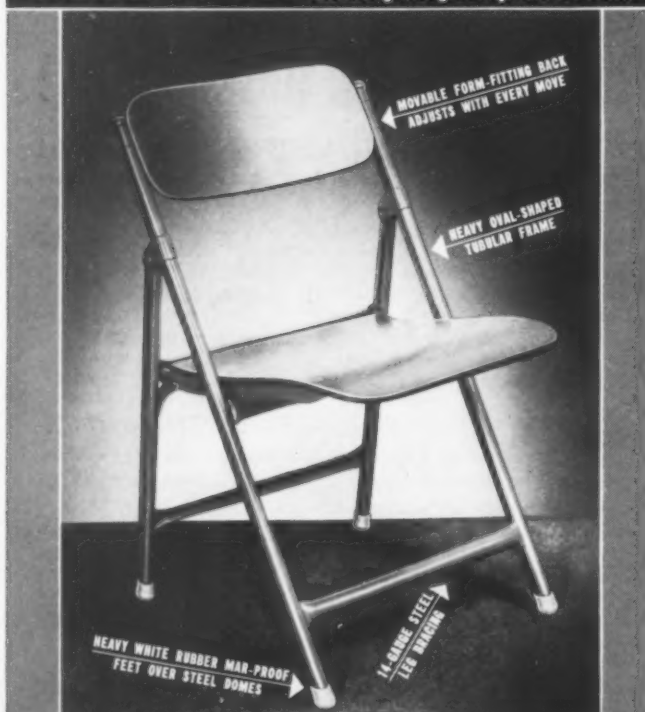
AGRICULTURE AND FARM LIFE. By Harry A. Phillips, Edgar A. Cocke-fair and James W. Graham. New York: The Macmillan Company, 1939. Pp. xiii+496.

A STUDY OF THE CONSTITUTION OF THE UNITED STATES. By George Allan McKisson. Bloomington, Ill.: McKnight & McKnight, Publishers, 1939. Pp. 98. \$0.48.

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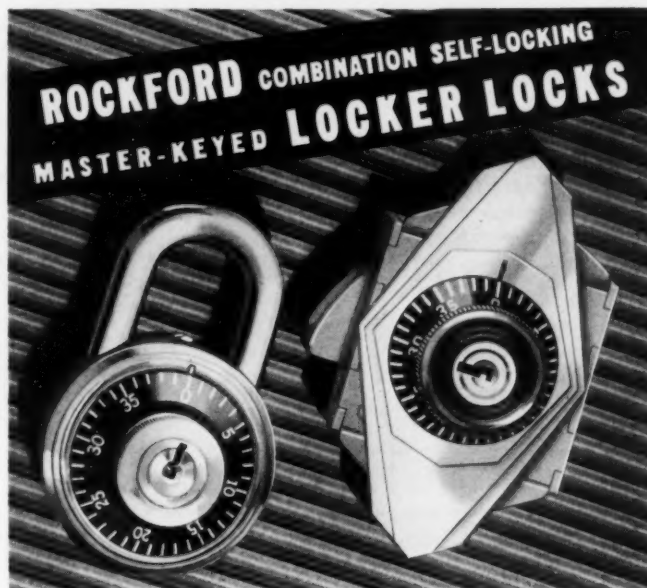
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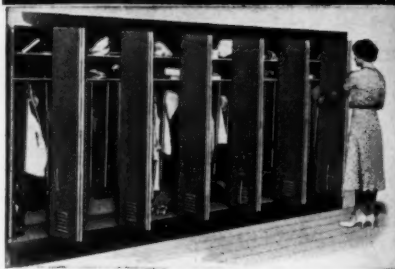
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Boys in Senior High Schools. By Ross L. Allen. New York: A. S. Barnes & Company, 1939. \$0.50 each (Paper Covers).

FEDERAL RELATIONS TO RESEARCH. *Pamphlets on Resources and Planning.* By National Resources Committee. Washington, D. C.: Superintendent of Documents, 1939. Pp. 29. \$0.10 (Paper Cover).

THE COMPARISON OF ENCYCLOPEDIAS. 14th Edition. By Laurance H. Hart. Cambridge, Mass.: L. H. Hart, 1939. \$0.25.

SUGGESTIONS FOR THE CONDUCT OF MEETINGS OF TEACHERS. *Bulletin 151.* Harrisburg, Pa.: Department of Public Instruction, 1939. Pp. 22.

IT'S SAID THAT—

An unusually high light reflection factor of more than 70 per cent is afforded by Nu-Wood Sta-Lite, a new insulating interior finish product announced by the WOOD CONVERSION COMPANY, St. Paul, Minn. . . . The IRON FIREMAN MANUFACTURING COMPANY, Cleveland, has added to its line the "Unit Heatmaker," which converts fuel into the final form of useful heat that provides complete automatic temperature regulation, including night

and day control. . . . For floor maintenance a new self-polishing wax that, upon application, forms a smooth film, giving the floor high resistance to water, has been marketed by SHERWIN-WILLIAMS COMPANY, Cleveland.

A test to determine the natural musical ability of school pupils is offered to schools by the PAN-AMERICAN BAND INSTRUMENT AND CASE COMPANY, Elkhart, Ind. The test is written so that it can be given with various instruments. . . . Horneblende aluminum roof coating, manufactured by the NORTH AMERICAN FIBRE PRODUCTS CO., Cleveland, produces a seamless, nailless, metallic coating that stops leaks, rust and corrosion and offers weatherproof protection to any type of flat roof surface. . . . The nerve-racking clatter of typewriters in typing classes can be materially reduced by the use of sound absorbent Kil-Klatter typewriter pads, manufactured by the AMERICAN HAIR & FELT COMPANY, Merchandise Mart, Chicago.

The DA-LITE SCREEN COMPANY, 2723 North Crawford Avenue, Chicago, has recently issued a 48 page book containing technical information on the brightness characteristics of various types of screen surfaces, charts of picture sizes and practical suggestions regarding the

selection of the right type of mounting for each user's requirements. . . . A booklet of ideas and suggestions for classroom layouts, covering laboratories, science rooms, homemaking room and shops is available from the HAMILTON MANUFACTURING COMPANY, Two Rivers, Wis.

The Bodiform auditorium chair, recently introduced by AMERICAN SEATING COMPANY, Grand Rapids, Mich., has a scientifically contoured back of two way curvature designed to fit the body of the occupant. . . . A brochure illustrating various types of school locks has just been published by the DUDLEY LOCK CORPORATION, 325 North Wells Street, Chicago.

The DETROIT-MICHIGAN STOVE COMPANY, Detroit, has opened a new display and office space in the Merchandise Mart, Chicago. This follows the opening of a new branch at 120 East Twenty-Fifth Street, New York. . . . Clyde W. Humphrey has joined the staff of the GREGG PUBLISHING COMPANY, New York, as representative in the southern states. . . . B. H. Witherpoon has been elected president and general manager of the SPENCER LENS COMPANY, Buffalo, N. Y. Prior to his election, he served as vice president of the organization.

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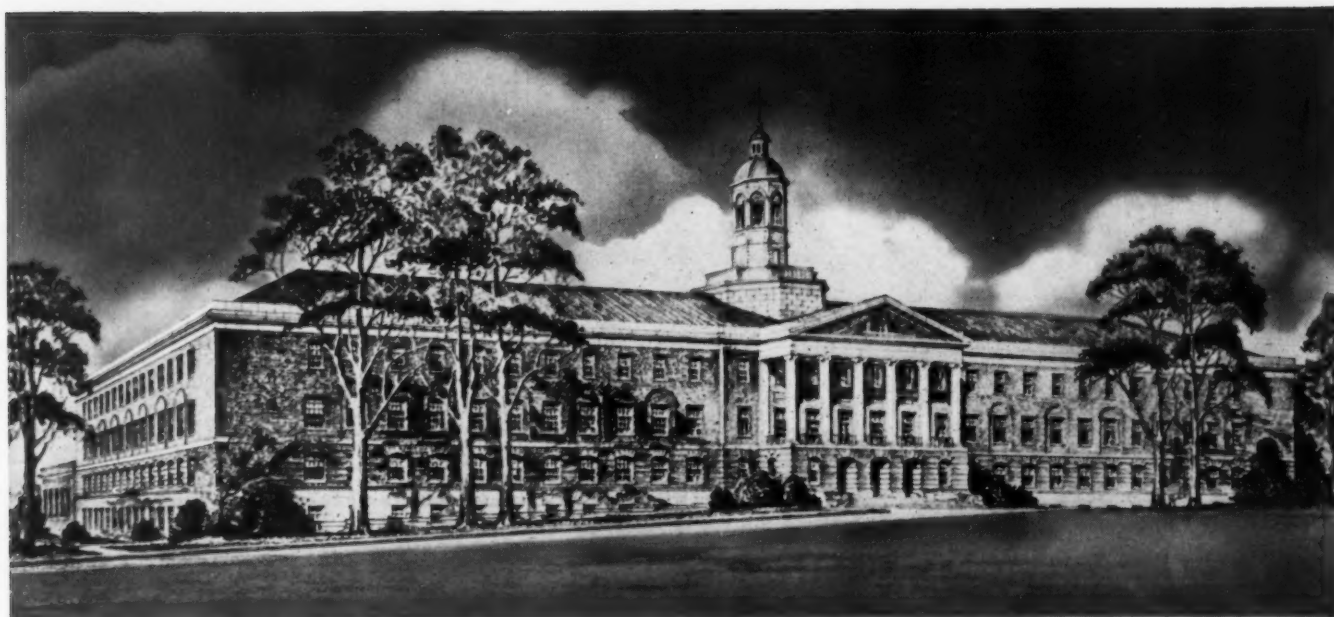
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Middle: American Bodiform auditorium chair

Right: American Universal table, with No. 268 posture chairs

Left: No. 47 tubular steel folding chair



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DETROIT

For June 1939

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FOR three months, beginning in July, a report on this year's legislation affecting the schools will be made in this magazine by M. M. Chambers, specialist in school law. An appraisal of the value of the new laws also will be made. This will be the first news presentation on this subject to the field.

THE classroom teacher, even more than the custodian, is important in keeping school buildings clean and sanitary. This is the thesis that George W. Grill of Lakewood, Ohio, will develop amusingly in the July issue. Assistant Superintendent Grill classifies classroom teachers into the untidy, the fussy, the "good, average" and the vital, with appropriate subdivisions.

"NIGHT SCHOOL, Country Style" by E. A. Juckett, supervising principal at Keene Valley, N. Y., will be an interesting addition to the literature on adult education when it appears in this magazine next month. It is the story of a consolidated school that serves community interests through evening courses in Everyday English, Everyday Reading, Business Helps, Current Problems, Home Nursing, Everyday Science and Everyday Culture. The district is large and hilly and some students must travel 12 miles to class, but they come and a heterogeneous lot they are.

BESSIE MUNK is a teacher in the Moore School for Boys, Detroit. She works with children with I.Q.'s ranging from 70 to 79. As you can surmise, the boys are poor readers. The work being done in remedying reading difficulties in a junior activities room will be told in the July number.

Published monthly by The NATION'S SCHOOLS PUBLISHING CO., Inc., 919 North Michigan, Chicago, and 101 Park Avenue, New York. Otho F. Ball, president; Raymond P. Sloan, vice president; Stanley R. Clague, secretary; J. G. Jarrett, treasurer. Yearly subscription, United States and Canada, \$2; foreign, \$3. Current copies, 25c each. Member Audit Bureau of Circulations. Copyright, 1939, by The Nation's Schools Publishing Co., Inc. Entered as second-class matter Jan. 16, 1928, at the Post Office at Chicago, Ill., under the Act of March 3, 1879.

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Miss Munk concludes that all children physically able to go to school can be taught to read on a par with their mental age when the causes of failures are eliminated and when diagnostic teaching is adjusted to the individual child.

SUGGESTIONS on how radio can help the one room rural teacher and her pupils will be made in the next issue by Frank J. Lowth of Janesville, Wis.

THE monthly portfolios have become something of an embarrassment—of a most pleasing sort. So many schoolmen want extra copies of the magazine that there never seems to be enough to go around.

Next month's portfolio topic is Auditoriums. As this is written, not all the copy is in, but if the contributors are as good as their word and if their articles are as good as their work, this special section will be a smash hit.

Lee Simonson, noted scenic artist, has promised to write on the tie-up between the theater and the educational program. Alice Barrows of the Office of Education will look at the auditorium in its progressive conception as a school theater. Architect Lawrence Licht is to discuss the high school auditorium, its location, lighting, ventilating and stage arrangement. Architect Alfred M. Korff will consider the small auditorium and the one that must double as a gymnasium. Principal Otto E. Huddle is at work on a manuscript on equipping the school stage and Principal Ross O. Runnels will consider the use of the auditorium by the community.

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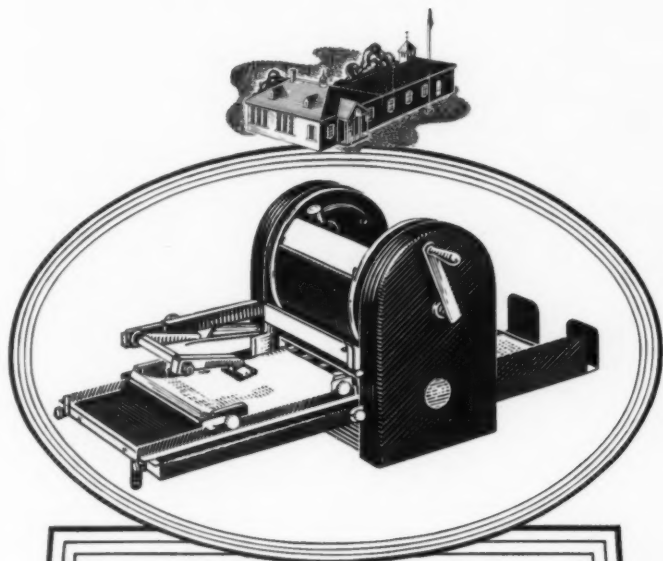
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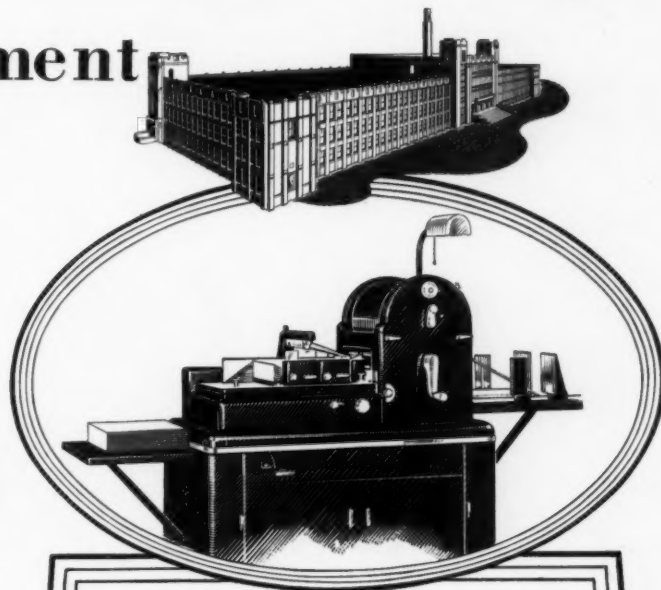
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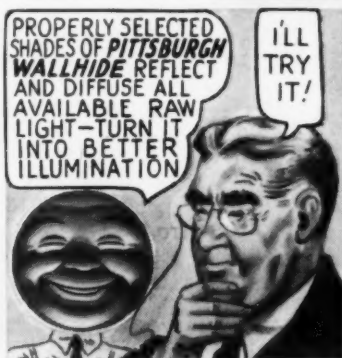
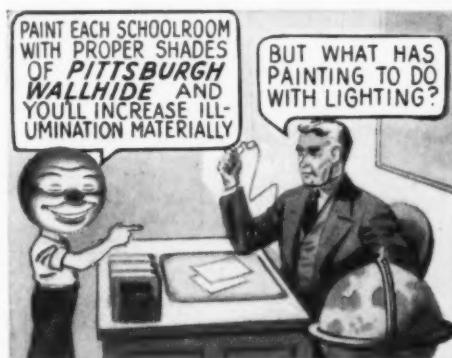
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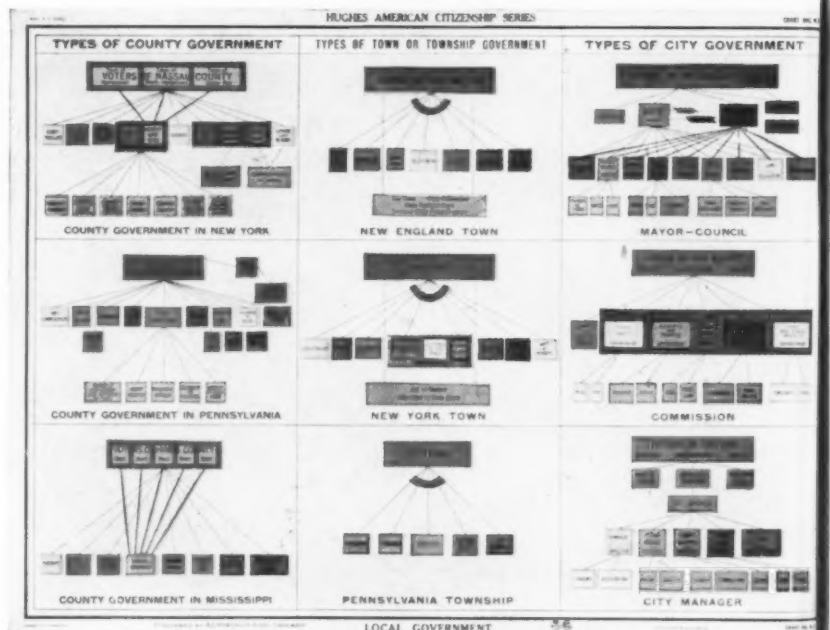
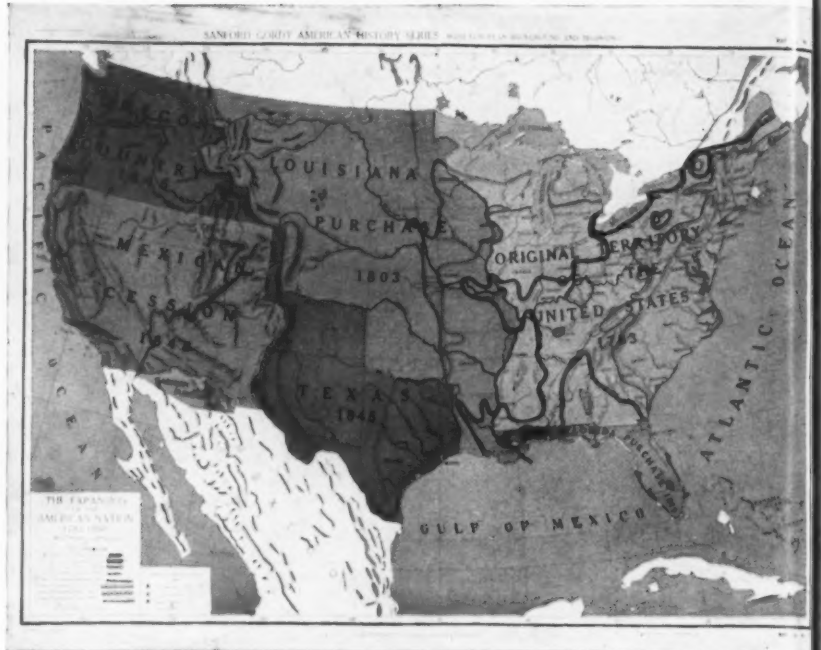
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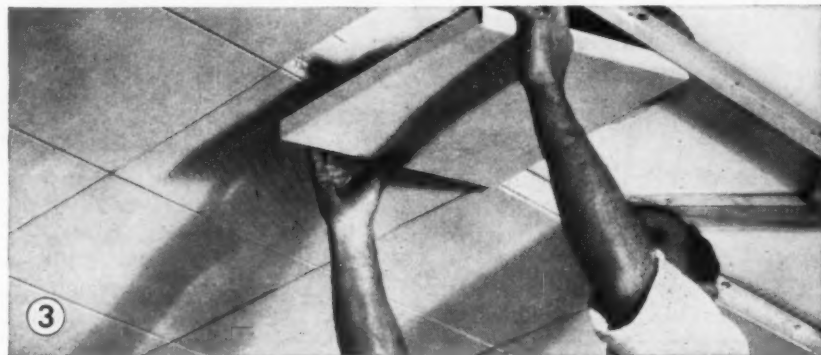




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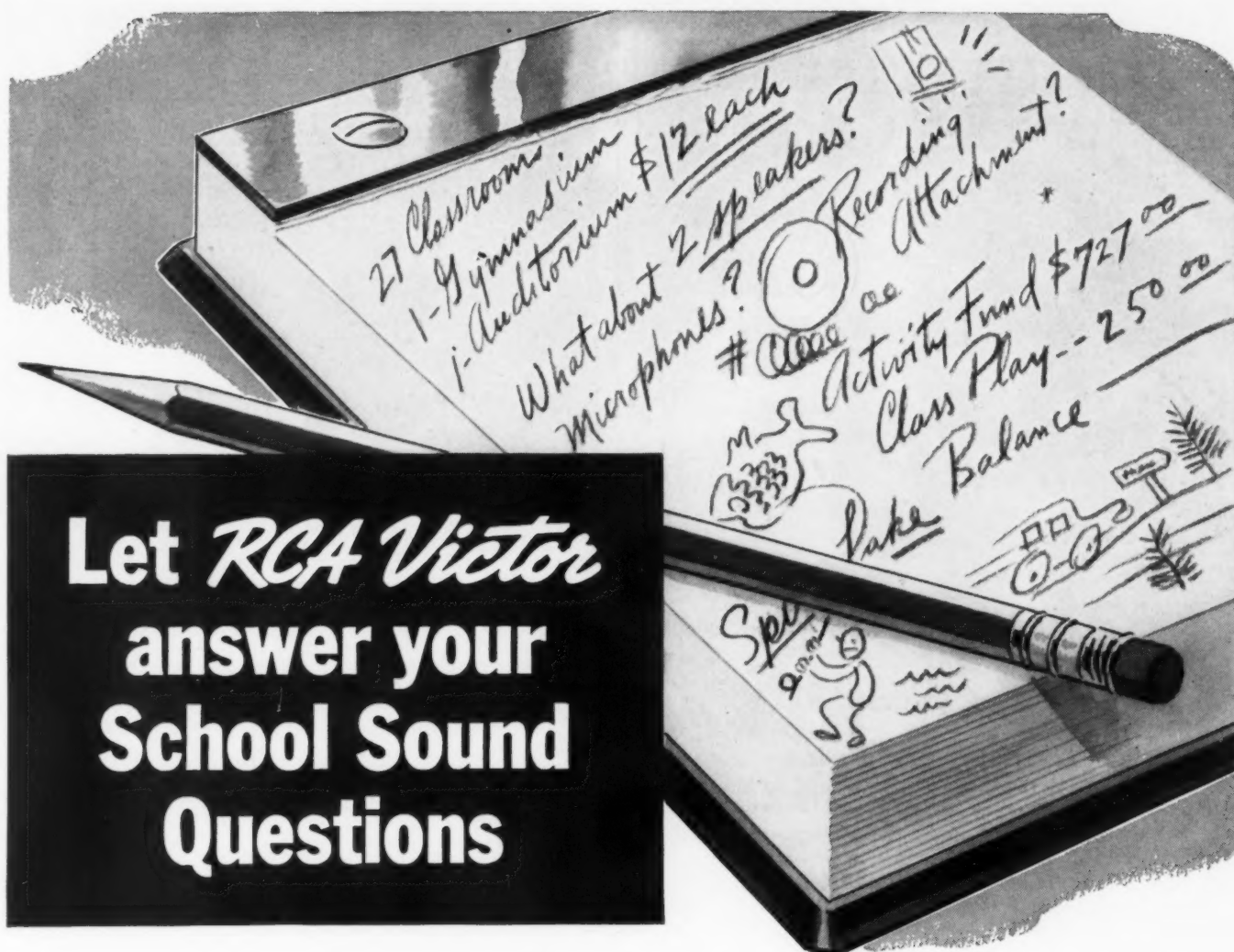
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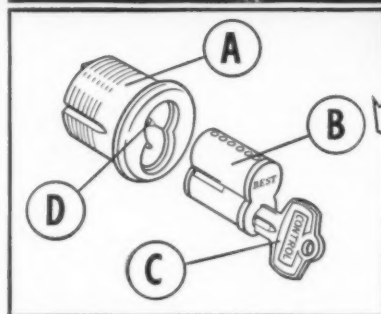
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LOOKING FORWARD

The Board of Education

IN A recent leaflet published by the U. S. Office of Education, entitled "Know Your Board of Education," this federal authority describes the function of boards of education, summarizing the contentions of specialists in school administration and better current practice in the field. In part, it states:

"In order to function efficiently a board of education should act as a policy forming body and in an inspectorial or judicial capacity rather than in an executive capacity. As a legislative body it formulates and adopts policies and places the responsibility for the execution of its policies directly in the hands of the superintendent of schools and in due time ascertains whether the policies are working out satisfactorily and, if not, why not."

The development of the superintendency since the World War has resulted in a gradual crystallization of differences between policy making and policy execution. The old-time board member who told the superintendent, principals and teachers how to conduct their work, helped purchase supplies and equipment and frequently had too intimate relationships with commercial agencies is rapidly becoming a curiosity. Essential supplies and equipment are being purchased today by educational specialists on merit in terms of their value to the instructional, instead of the political, process. This change is one of the factors in the growth in the efficiency of the instructional program.

Visual Aids to Education

VISUAL aids have played an important part in the instructional program since the days of the New England primer. Removal of all visual material would leave the teaching program impoverished. Emphasis in progressive schools on the newer types of visual aids has tended to obscure the value of the many long and steadily used educational materials that stimulate and motivate through the sense of sight.

It is the purpose of this month's condensed presentation of visual aids (see page 33) to consider all those materials specifically used to supplement classroom instruction as well as those materials that comprise the

intelligently developed and complete educational environment.

Direct visual aids in logical sequence include textbooks and reference works; supplementary illustrations; wall writing boards; maps, charts and globes; collections; models; handcrafts; laboratory and other educational apparatus and equipment; stereopticon pictures or "stills"; motion pictures, and community excursions.

Among the earliest forms of visual education were the illustrations in the New England primer. Since that day alert textbook publishers have tried to furnish the school not only with good textual content but with telling illustrations, first in black and white and, more recently, in color. As new processes of reproduction have been perfected, they have been utilized; the increased effectiveness of the present day textbook can best be appreciated when it is contrasted with the old.

To supplement textual material there has gradually been added a wealth of pictorial material of other types. Color reproductions of the art of the ages are now available at a price within the range of ever-limited school budgets. This material may be used as supplementary instructional material in classrooms or it may be gathered in school museums and school art galleries.

In recent years schools have discovered the educational value of laboratory and shop equipment. Instead of hiding attractive apparatus in dark storerooms, the newer practice is to provide built-in glazed cabinets in which mechanical instructional aids may be studied.

Probably the most significant advance has been the motion picture. History is lived over again in a manner more vivid than written presentation; the achievements of science and technology are brought from laboratory and factory to the child, and even the marvels of nature have been captured by the magic of photography. Motion pictures require supplementation by the controlled exposure of individual pictures as lantern slides or by other forms of projection.

The planned community excursion is another means of supplementing reading and photographic material. It furnishes direct contact with the actual processes of community living.

Environmental or indirect visual aids include the

school building and grounds. The use of cheerful and pleasing colors in classrooms and in specialized rooms increases the attractiveness of the instructional program itself. Good pictures, sculpture and murals in rooms and corridors may ultimately have as important an instructional value as technical teaching. The place of the school plant interior in the development of an appreciation of beauty and in the creation of a standard of taste has not yet been fully appreciated.

The architectural beauty of the school building and landscape is another striking visual aid in the complete education of the child. The environmental influence of the total school plant is not confined to the children but permeates the entire neighborhood and creates an adult attitude toward the institution that is worth more than thousands of dollars worth of high-powered direct publicity.

In these various ways visual aids enrich the instructional process. Most of them are within reach of even limited educational budgets. What is needed is not a large increase in funds for visual education but a greater appreciation of its value.

Charles Lyle Spain

CHARLES LYLE SPAIN is one of those rare individuals whose life has been devoted completely and wholeheartedly to the advancement of teaching. His official retirement in June, at the age of 70, as deputy superintendent of the Detroit public schools and executive vice president of Wayne University marks the passing from the administrative stage of a teacher of outstanding ability and unusual character. He has been associated with the Detroit public schools since 1901 and there, for more than one-third of a significant educational century, his ideas for the improvement of education have been projected into every area of that huge urban system. Doctor Spain's contributions to instruction and to the theory and practice of city school administration have been of outstanding value, not only to Detroit but to the country as well.

A native of South Bend, Indiana, he attended its public schools and later the University of Michigan, from which he received the bachelor's degree in 1893, the master's degree in 1920 and the doctorate in philosophy in 1923. His professional career started as a secondary school teacher in Grand Rapids in 1893, but after five years his major interest turned to elementary education and he served as an elementary principal for nearly four years. In 1901 he was called to Detroit as vice principal of the old Washington Normal Training School, becoming principal in the fall of the same year and continuing until 1906.

While heading the normal school he was responsible for significant changes in the teacher training curriculum. His work as principal was so successful that he became supervisor of primary grades in 1906. This

was a mixed job. He was responsible for both the administrative and staff work for the early elementary years and much of his effort was devoted to reorganization of the elementary curriculum. His curricular achievements were little known outside of Detroit because of the peculiar nature of the organization. Current study of his recommendations and work indicates progressive ideas in teaching that have only gained widespread approval in recent years.

Doctor Spain became general supervisor of elementary education in 1913 and was promoted to an assistant superintendency in 1914. During the entire administration of Doctor Chadsey he was in charge of elementary education and devoted much of his time to the encouragement of the scientific movement in education and experimentation with newer types of elementary instruction and administration. He developed departmental instruction in the elementary grades and improved the administrative plan under which enriched curriculums and specialized buildings could be used efficiently and economically. This plan, which grew out of the original experimentation of Doctor Wirt in Gary, became known nationally as the platoon school.

In 1919 the board of education elected Frank Cody superintendent and at the same time named Doctor Spain deputy superintendent, in which position he was responsible for the technical administration of the entire system. During the early part of this period Doctor Spain was involved in the promotion and execution of the first large scale internal continuing survey, assisted by a brilliant group of educators who had been gradually attracted to Detroit. After the completion of the major survey task, he administered both elementary and secondary education. The rapidly emerging collegiate units were still in experimental form and not integrated with the rest of the system.

When it became obvious that these collegiate units were to be of more than casual significance, Doctor Spain was named executive vice president of university education in 1933 and served in that capacity until his retirement this year. Under his administration these quasi-independent collegiate units became Wayne University. His unusual skill in the solution of this knotty problem established the pattern under which Wayne University will probably continue to operate for many years to come.

Despite the unusual pressure of administrative routine, Doctor Spain managed to find enough time to maintain his primary scholarly interests. Apart from the authorship of elementary texts, his major productive contributions were "The Platoon School" in 1920 and "Public Elementary School Plant" in 1930, in the preparation of which he collaborated with Frostic and Moehlman. Since 1933 he has served as editorial consultant of *The NATION'S SCHOOLS*, contributing articles of unusual merit.

A summarization of Doctor Spain's professional achievements includes unusually valuable contributions to the advancement of teacher training, elementary instruction, elementary administration, the educational designing of school buildings and, finally, the task of organizing a huge urban university, any one of which might be considered as a reasonable life achievement. Despite the tremendous pressure of work and the strain that is always present in large city school administration, Doctor Spain always remained human. He had little patience with stupidity, cupidity or selfishness but a tremendous patience with anyone who wanted to learn. He stimulated and protected ability wherever it was found and frequently took the blame for mistakes made by others because he felt they needed a shield. Few men have spent more time working with young people and few administrators have been able to develop a greater respect and a deeper affection on the part of all who were associated with them. As an elder educational statesman he still has a big contribution to make.

Writing Tools

THE possibility of using the typewriter as a new elementary school writing tool was conceived almost a decade ago by forward-looking experimentalists. The work of Freeman, Reynolds and others has been well publicized. The NATION'S SCHOOLS was the first professional publication to recognize the possibilities of this innovation. Numerous experiments have since been conducted in different parts of the country and all point to the fact that children in the postprimary grades are thoroughly capable of using this device.

On the other hand, the experiences of generations with different methods of teaching handwriting indicate clearly that, while it is relatively easy to produce good handwriting by any one of five methods, there is a low carry-over into actual life. Many schools that have retained records of handwriting of a generation ago have been able to obtain adult specimens twenty or thirty years later to compare with the preserved samples. The results show without exception that there is little correlation in legibility between the child and adult products. Since this is true, it appears desirable that after a certain degree of competency has been achieved in handwriting, the children be permitted to learn the use of the typewriter, a sensible individual writing tool for the child, as well as for the adult.

While the typewriter is being extensively employed in progressive elementary schools, it is making little progress elsewhere. The reason for this condition appears to be the cost of these tools in relation to limited depression equipment budgets. Schools today have a choice in this field of standard sized machines or of greatly improved lower priced portable instruments which, because of size and weight, seem specially suited

to the postprimary child. Improvement in the durability of these smaller machines has tended to make them more popular and practical than they were in their early developmental stages.

Truth Will Out

IT MAY take a long time for truth to prevail but there is much comfort in the assurance that it will ultimately do so. Thus in the fullness of time the light of objective research replaces the sentimentality of directed propaganda, the idols get their faces well washed and the people get a new and much more sensible perspective of people and times.

If the debunking process takes place too soon after the departure of the heroes from this mundane sphere, reactionaries and image worshippers are annoyed and their reactions may be nasty and unpleasant. The treatment of the American historians after the World War by the sons and daughters of conservator interest groups, who objected to the honest humanization and more rational delineation of the founding fathers, must still be fresh in academic minds. If, however, the acts of objective reorientation take place when time or lack of interest has reduced emotion to a low point, the debunking process may furnish delicious humor and enjoyment, in addition to the truth.

In the spirit of truth we welcome Dewes Winspear, an orthodox professor at the University of Wisconsin, to the group that values facts above popularity. His recently published "Who Was Socrates?" (The Cordon Co.) strips from that gentleman the protective garb that Plato's propaganda wove about him. Socrates apparently was not the sturdy, self-denying philosopher who died for the sake of truth, as several enthusiastic teachers attempted to inculcate in our resistant youthful mind, but instead a young radical who, as his arteries hardened, became the normal conservative of old age and tried, as is frequently the habit of old and confirmed reactionaries, to undermine Greek democracy. After 50 when, as a philosopher, he should have known better, it seems he helped to stage a Nazi *putsch*, Greek style. He apparently also had some minor part in a program of totalitarian "education" through which 1500 Athenian youth were "liquidated," because they were not receptive to "education." When the democrats returned to power, Socrates, without the protection of civil service, was among those whose talents were recognized to the extent that he died before testing completely his actuarial possibilities. Socrates should be a warning for any politically minded pedagogue with fascist leanings. Truth will out and we can now read Plato again with a wide grin. We've discovered his propaganda.

The Editor

Lansing Schools Serve Society



GETTING "PRETTIED UP" . . .



CLOTHES MENDED AND PRESSED . . .

THE foundation for a democratic way of living begins in the home with the small child. The core of our society, the home and the family, cannot be overlooked as an important phase of education.

By studying families and homes and by understanding the needs and interests of the children, the school can provide actual participation in life experiences. If this contribution is to be made vital, it is essential that homemaking education go beyond the home into all those institutions that affect home and family living. The school and home must jointly accept the responsibility of guiding boys and girls in working out a plan of personal, home and family living that will make for a happier and better society.

Although change is one certainty about modern education and al-

though programs are continually being analyzed and reorganized to a confusing extent, the homemaking program has undergone a normal growth. Its development has been directly influenced by the change in the home and family brought about by social and economic pressures.

When home economics was introduced in the public schools of Lansing, Mich., it was only natural that emphasis was placed on the physical side of home life, for the home was then an important productive unit.

In the horse and buggy days, home economics was better known as "cooking and sewing," with the main objective in teaching subject matter and developing skills on the part of a few girls in the elementary and secondary level.

The department passed through the state of domestic science and

MARGIE THOMPSON

domestic art to home economics, with the emphasis still on skills and subject matter. More girls in the secondary level were included in the program. The branches extended in four directions: food, clothing, shelter and management.

In the next picture all members of the family were included. The emphasis changed from skills and subject matter to family relationships. The divisions of food and nutrition, textiles and clothing, the home and the family were included in the program.

Today the analysis of home life shows clearly that activities are diminishing while social, psychologic and economic problems are multiplying. This changes the complete em-

Through Homemaking Units



FOR THE TEA PARTY IN THE AFTERNOON

Home Economics Supervisor
Lansing, Mich.

phasis of the course in school. The main objective, then, is human relationships. There are two major branches: (1) the home and family and (2) the individual in the home, society and business. Therefore, the present conception of homemaking in the schools involves problems and units that contribute to these major branches.

As a person plans his time each day, he groups his activities into certain areas. Our programs and courses are planned on this same basis. For the purpose of organization we have divided all life activities into areas with which certain problems are concerned. Every individual and family has to be fed, housed and clothed. If we are to

have a healthy nation we must know how to protect the individual's health, to prevent illness and to care for the sick in the home. The responsibility of caring for and providing for the baby's and child's development is one that every member of the family should assume. Many individuals and families need advice and guidance on everyday, intimate and social relationships within the home and community.

Because it is recognized that the success of the home depends largely upon its effective management, at least one course in homemaking is required of all girls in junior high school. Once their interest is aroused, many girls voluntarily choose to take more courses, and in this way a splendid foundation for future home building is laid. The work may be continued in senior high school and

the beginning of a vocation may be started. In both junior and senior high school some courses are offered for boys as well as for girls. Many boys choose to participate in this work.

Although it is not dignified with that title, homemaking really begins in the kindergarten. Here the little children take their brooms and dustpans, their cleaning cloths and garden tools and they work just as mother and daddy do at home. As they progress through the grades, school housekeeping is constantly kept before them and ideals of neatness, orderliness and care of equipment of all kinds are built. It is in junior high school, however, that homemaking really comes into its own and some boys as well as girls don caps and aprons.

So often young people assume the



Consumer education and the selection of suitable clothing go to make up a modern course in homemaking. One course is required of every girl.

attitude that the home owes them food, shelter, clothing and a social life but that they owe the home nothing. In these homemaking courses the fact is stressed that with every privilege comes a responsibility. Boys and girls are made to feel that no home can be happy unless each member contributes his share to its well-being. These young people decide what their share of this responsibility should be in their individual homes. They realize that they have a duty not only in the care of the physical upkeep of the home but also in its social and ethical spirit.

Do you remember the shamefaced way in which a boy of a generation ago carefully closed the kitchen door so that the "fellows" wouldn't see him when he washed the dishes or swept the floor? Perhaps he still does so when he is engaged in these domestic pursuits in his home but no longer is this the case in school. Here boys and girls mix freely in the work of homemaking and the boy

as well as the girl is seen at the kitchen range or the pressing board.

Boys and girls have come to realize that it is just as necessary for them, as future homemakers, to know how to cook, sew, clean, wash and iron, how to figure the expense of running a home and how to care for the baby according to the best modern ways, as it is to know how to read and write and have an appreciation of music, art and literature. No one will minimize the need and desirability of the latter, but homemaking has its place with the best of these.

It is important that boys and girls be helped to success in their personal and social relationships by practical experience with problems of everyday living. All boys and girls in high schools should have an opportunity to elect courses that will give them experience and guidance in such units as leisure time activities, vocational possibilities, boy and girl relationships, how to make oneself

attractive, good manners and conventions, personality adjustments and how to be well dressed on a small amount of money.

The courses are kept practical throughout. Girls are taught how to select suitable garments for all occasions, how to care for clothes, how to keep them cleaned and pressed; and they learn to make various articles of clothing both for themselves and for others.

The planning of well-balanced meals on large or small family budgets, marketing, cooking and storing of food, diets for babies or adults, all go to make up a modern course in homemaking. With the increased interest in these things on the part of our boys and girls it would seem that the American home of the future is not in grave danger as we are often led to believe.

The activities within the homemaking department have had their origin from surveys, conferences with parents and teachers in other departments, home visits and an understanding of the needs and interests of the boys and girls of today.

Shall the Curriculum Be Scrapped?

PAUL J. MISNER

Superintendent, Glencoe, Ill.

NOT infrequently the proposal is made that a written curriculum document is no longer necessary. Educators of the radical persuasion are insisting that the needs of individuals differ so widely and the needs of society are changing so rapidly that it is impossible to formulate a dynamic program of education for more than a few weeks in advance. These individuals almost insist upon an educational program whose direction can be changed every Monday morning.

The need for improvement of curriculum policies is admitted. Many educators are working hard at this job right now. The suggestion that there is no longer any need for a planned curriculum program is, at least, controversial. It is the purpose of this article to consider why curriculum programs should be revised rather than scrapped. The reasons will be discussed in terms of the following needs: (1) the need for clearly defined statements of educational and social values; (2) the need for clarifying some muddled pedagogical concepts; (3) the need for clearly defined policies as the basis for evaluation.

Little Positive Action

The development of citizens for intelligent participation in a democracy has been a major concern of public education since the beginnings of our national life. George Washington insisted that education was essential to the achievement of democratic purposes. Practically every speaker at the recent meetings of the American Association of School Administrators rededicated himself to the safeguarding of our democratic traditions and institutions. Yet, in spite of this continued devotion to democracy, little is being done to translate noble sentiments into positive action. If education in America is to save democracy, there must be some general agreement concerning the meaning of democracy and some unity and consistency of action in achieving democratic purposes.

It is true that written curriculum documents have usually included statements concerning the aims and purposes of education in a democracy. Too frequently, however, these statements have been vague abstractions paraphrased uncritically from the philosopher's notebook. A dynamic curriculum program will deal specifically with democracy in action. Relationships between administrators and teachers will be considered. The achievement of more democracy in the organization and administration of a public school system is a difficult and complicated problem. It will not be solved either by the benevolent despot or by the labor organizer.

Policy Should Be Democratic

Curriculum policy should indicate how the relationships between administrators and teachers can be made increasingly democratic without sacrificing the unique functions and contributions of either.

The relationships between pupils and teachers present another opportunity to develop realistic curriculum thinking concerning the implications of democracy in action. Most persons will agree that democracy cannot be taught. It must be experienced. Critical examination of pupil-teacher relationships in almost any school system will reveal little unity or consistency in providing pupils with opportunities to practice real democracy. What one teacher may call democracy another may call anarchy. What one may call freedom another may call license. A virile democracy cannot be "all things to all people." There would seem to be need for the formulation of curriculum policies that suggest the kinds of pupil experiences that promise most for the democratic way of life.

The relation between school and society is another area within which there is need for curriculum thinking and planning. This is another

complicated problem. The implications of democracy are not completely obvious. Organized education is challenged repeatedly to dedicate itself to the building of a new social order. This would seem to be an extremely worthy thing for education to attempt. The question as to how it shall be done presents some real difficulties. Some persons suggest that it should be done by an aggressive alliance of the teaching profession and organized labor. Others insist that it should be done by extending the education function to include all community individuals and groups. Still others suggest that organized education remain as completely aloof from the social scene as possible. The clear formulation of policies concerning this problem is obviously a major concern of any curriculum program.

The foregoing illustrations simply suggest a few possibilities of formulating specific curriculum statements that will look toward the translation of democratic theory into democratic social action. If organized education is to achieve significant democratic purposes, the curriculum should indicate clearly how it is to be done.

Terminology Is Confused

In a recent publication Stuart Chase has suggested that word trouble is causing considerable confusion among economists, sociologists and politicians. There are many evidences that professional educators experience the same difficulty. The words "interests," "needs," "growth" and "subject matter" are a few of the pedagogical concepts concerning which much difference of opinion exists.

Not long ago Nicholas Murray Butler characterized education based on the doctrine of interest as rabbit education. He contended that pupils in some progressive schools behaved like rabbits in that they nibble here and nibble there without getting a substantial mouthful of anything. The progressive educators will insist that Mr. Butler misinterprets the

meaning of interest. They will contend that application and concentration are obtained in learning situations only when pupils are encouraged to pursue clearly defined purposes that develop out of their individual group interests.

Needs is another concept that is likely to receive different interpretations. Some persons insist that children are immature and need considerable direction on the part of adults. These persons are inclined to accuse the progressives of catering to childish whims and caprice rather than meeting the basic needs of the individual and society. The progressives will contend that adult direction is preparation for a dictatorship rather than preparation for democratic living. They will emphasize the needs of children for wide opportunities to think and to act for themselves.

The concept of growth causes confusion. The essentialists want objective evidence as it is revealed in the results of standardized tests that pupils are learning. The progressives minimize the importance of such evidence and would evaluate growth more in terms of the continuous integration of individual personalities.

Subject matter has long been a matter of controversy. The progressives value subject matter to the extent that it is useful and helpful to persons in solving their problems and extending their experiences. The es-

entialists insist that such a view of subject matter will cause the learning process to be like a flower that has only a stem but no roots.

Many other illustrations of word trouble among educators could be added to the foregoing. These are probably sufficient to indicate that a major function of curriculum planning should be to clarify confused thinking in the interest of greater unity of purpose and action.

A more significant evaluation of the results of the learning process is a problem with which many educators are becoming increasingly concerned. It is being recognized that traditional technics of evaluation are inadequate. Standardized achievement tests may reveal in part what pupils have acquired in the process of learning. These instruments do not, however, indicate how knowledge and skill were acquired or what happened to the pupils during the process of acquiring them. There is great need for the development of technics by means of which the more important results of the learning process may be evaluated.

It should be recognized, however, that the development of more effective technics of evaluation will depend upon the extent to which the aims and purposes of the educative process have been clearly and specifically defined. Most persons will agree that education should help individuals make satisfactory personal

and social adjustments. Before it can be determined to what extent education is achieving this purpose it will be necessary to know what is meant by personal and social adjustments.

The ability to do critical thinking is a purpose of education concerning which there would probably be large agreement. The obvious failure of education to obtain much evidence of success in the achievement of this purpose is undoubtedly due to the fact that too little is known concerning the precise nature and function of critical thinking.

The development of desirable social attitudes and ideals has long been a professed purpose of education. Effective evaluation of the extent to which this purpose is being achieved will depend largely upon what is meant by attitudes and ideals that are socially desirable.

The need for evaluating many of the more intangible results of the educative process will be generally admitted. It would seem, therefore, that curriculum planning should seek to define educational objectives in such a manner that they can be made the basis for the development of more comprehensive technics of evaluation.

There is evidence of widespread dissatisfaction with curriculums that formulate in advance what persons are to learn and how and when they are to learn it. Such dissatisfaction is most desirable. The needs and interests of both individuals and society are relatively unpredictable in these days of rapid change. It is important, therefore, that curriculum policies reflect a high degree of flexibility. It is equally important that present experience rather than subject matter be emphasized as the unit element of all learning activities. Such a concept of curriculum seems to justify more rather than less emphasis upon group thinking and planning. A flexible curriculum that is responsive to the changing needs and interests of persons cannot be effective unless teachers know what they are doing and why they are doing it. Instead of scrapping the curriculum it should be revised to the end that educational purposes and the means of achieving these purposes become clearly defined and understood by all persons concerned.

Bus Discipline Is Different

R. A. GRIFFIN

DISCIPLINE in a school bus is different. The classroom teacher holds the pupils in check all day and at 4 o'clock turns them loose as a mob to pile into the bus any old way they like. The scramble for a seat beside a friend is terrific.

The bus driver sits with his back toward the gang. He must be on the alert for traffic and his list of roadside hazards that must be watched is endless. Besides, the old "jalopy" that is sometimes called a school bus may not be hitting on all cylinders.

If superintendents and teachers would convince children that being

transported to and from school at public expense is not a daily joy ride and instill in their minds some knowledge of the hazards involved and the social courtesies that should be observed, then the bus driver could concentrate on his big job of safe driving. Most teachers are attempting to do this, but infrequent campaigns will not turn the trick. Keeping everlastingly at it is the one way to solve the discipline problem of school transportation. Wholehearted cooperation by parents, board members, teachers, pupils and drivers is the way out.

Are Schoolmen Old at Forty?

WILLIAM N. ATKINSON

Principal, Macomb, Ill.

A SHORT time ago a man who had served more than ten years as a school administrator in a city of 25,000 applied for a new position. His credentials were satisfactory in every way except that he had reached the age of 40. He was automatically eliminated from further consideration because the board had ruled to consider only candidates below that age. Ten years earlier his greatest handicap in obtaining a position had been his extreme youthfulness. A short span of professional desirability, indeed!

Examples illustrating the same condition could be multiplied almost without limit. Almost every middle-aged schoolman has faced it and younger men fear it. What are the causes of this situation and what are its effects? These questions are important to schoolmen and to the public that they serve.

Promotion Means Moving On

Our public schools are numerous and usually small. The opportunities for financial advancement in remaining in one district are decidedly limited unless the district happens to be increasing rapidly in population and taxable property. This means that promotion usually necessitates a new position. This new position depends upon the will of a group of laymen, the board of education.

The average reasonably conscientious board member, in considering the age of applicants, argues somewhat as follows:

1. A good school depends largely upon efficient and relatively uninterrupted administration.

2. Therefore, we want a man who is professionally alert and physically able to work energetically in the schools for a number of years.

3. If a man of more than 40 is applying, the chances are that he is a mediocre school man who is doing poorly in a similar position or who

is in an inferior position at present.

4. Even if he is superior, after 40 the years of energetic activity are less and, if we select a man of this age, we should expect a speedy interruption of administration from dismissal or retirement or decreasing efficiency because of age.

The common less rationalized attitude, which probably activates the unthinking board member, is simply that after 40 a man is "too old" for useful service.

The latter argument has been exploded by recent investigations. Some activities, it is true, are definitely for the young. But men in their forties and beyond have turned in creditable performances in tennis, golf, wrestling and the new and arduous sport of cornhusking. On the vocational side, let us consider the exacting and often strenuous occupation of railroading.

Fred W. Sargent, president of the Chicago and North Western Railway, asserts that "the backbone of the system is the group between 40 and 60. It is there we find the maximum of dependability, good judgment and loyalty. . . . Employers make a mistake by judging age by years. Age is a question of enthusiasm and interest, not of calendar months.

"When we put on a crack train we pick an engineer whose age may run close to 70. Any idea of reward for long and faithful service is secondary. Capability of the man has to be the first consideration and our decision may be interpreted as a tribute to experience that comes only with years."

When a great railroad values maturity and experience so highly as a factor in physical safety and efficiency, can the schools despise them as factors in educational safety and efficiency? A glance at the heads of successful enterprises in any community should convince anyone that the qualities necessary for effective lead-

ership are much more in evidence after 40 than before. The head of a school must have a knowledge of the educational requirements of the type of community served by the school; an understanding of all factors related to effective learning and teaching; skill in handling people, patrons of the school, members of the staff and pupils; a genuine interest in his job, and capacity for work. Some of these are possessed by young executives, but certainly it is absurd to imagine that they vanish like a broken bubble at the awesome age of 40.

Board Members Feel Superior

Returning to the reasons for the forty deadline, let us consider the school administrator himself. Until recently (and still in some sections) education has been regarded as a stepping stone. Requirements were low, and incomes relatively high for beginners. A surprising number of successful business and professional men were in school work of some sort immediately following graduation from college or at some time preceding the completion of their professional training. As board members today, many of them subconsciously feel that school administration is something simple and a trifle inferior, which they mastered and outgrew in their youth.

However, it is with those who remained in the profession that we are now concerned. Many entered, as the others, without intention of continuing. Then, for one or more reasons, they remained. Some, unfortunately, lacked the ability to compete successfully elsewhere. All were inadequately trained but most of them were complacent in their ignorance. They blundered on through the years, learning a little by experience and less from professional meetings. Educational science was progressing but they stood still.

In such a situation, those most recently out of college were best trained. A man of 40 or even 30

might approach closely the classification of "old fogey." Younger men were better because, even with less experience, they were better equipped professionally than their elders. To this extent, the attitude of the conscientious board member was at one time justified.

What has happened to those schoolmen who have taken their profession seriously? Some advanced with considerable rapidity to really good administrative positions. Others entered some specialized field of university instruction or research. Some contented themselves in doing a really good job in a relatively small community where their services have been appreciated.

Too many, it is to be feared, have fallen victims of the tendency of boards and communities to lump educators together in age groups. They have failed or delayed too long in their efforts to obtain promotion and are being shifted from one small community to another, without opportunity or ambition to perform the

professional service of which they are capable. Still others have given up the struggle and reluctantly have accepted the conclusion that the society which they studied and labored to serve puts a small premium upon professional competence as compared to the beaming countenance of youth.

Now let us consider once again the arguments of the conscientious board member. We must surely admit that, as a generalization, professional history has given the third proposition some support. Progress usually comes quickly or not at all and selection is made early. But if the board member is really conscientious he should look beyond generalizations. This candidate of 50 may be younger and more alert professionally than any of the candidates of 30 or 35 and may apply more energy to his work and do it much more efficiently. Neither is it wise to generalize too strictly on past professional progress.

The fourth proposition already has been touched upon. Youthful dash is not an essential characteristic of

the good administrator. Of course, if one has been trading on that and nothing else, when it is gone he is valueless. But it is a mistake to assume that every man in his forties or fifties is due for an immediate and speedy decline.

Nor is the assumption that the employment of younger men will provide a greater continuity of administration unassailable. If the system is so modest that no middle-aged man of high caliber would care to enter it, neither is it so impressive that a young man of high caliber will care to remain in it. He will have the urge to seek greener fields while the older man is more likely to make his services indispensable with the intention of remaining.

The results of all this are obvious. Schools adopting, either openly or tacitly, arbitrary age limits for candidates often lose desirable qualities of stability, experience and professional maturity. They provide their faculties instead with youth and pep, which may be admired or envied but which may lead to a round of poorly planned experimentation and rather futile activity, injurious rather than beneficial to the schools.

The long range results of the policy are doubtless even more serious. It serves to perpetuate professional mediocrity. At best, the rewards of education are scarcely attractive enough to win really competent young men from more lucrative professions. When they find that the age that marks the beginning of firm public confidence for a doctor, lawyer or business executive is the age of obsolescence for a schoolman, they can hardly be criticized for hesitation or withdrawal. Within the profession, as we have seen, ambition for professional improvement is stifled. When boards look at the birth certificate more closely than at the professional record it is easy to drift into the belief that professional study is a poorly paying investment.

Insofar as the forty deadline is observed by boards of education the general ability level among educators will remain relatively low. The critics who now point to the backwardness of our educational system in meeting modern needs will have in the future no dearth of evidence to support similar charges.

Shall We Use Caps and Gowns?

O. WENDELL HOGUE

Principal, Croton High School
Croton-on-Hudson, N. Y.

WHAT shall our boys and girls wear for commencement? This question is difficult to answer. If the problem is left to the pupils, there is always danger that they may select clothes not in keeping with a high school commencement. Therefore, it has been necessary for some teacher to supervise the selection of clothes. As styles in both boys' and girls' clothes change, it is impossible for a teacher to use previous years' outfits as a basis for the present year's selection.

The high school cap and gown has solved this problem. When caps and gowns are adopted by a school, the graduates have a garment that style will not change and an outfit that has significance.

The cap and gown is a formal attire but it is most democratic, too. Uniformity is an advantage. All the members of the class are dressed alike and no one feels any embarrass-

ment because his clothes suffer by comparison with those worn by the pupils next to him.

Because of the significance of caps and gowns, the commencement exercise is more impressive, both for the graduate and the audience. Most parents see their child in some form of school activity at some time during the four years of high school. On such occasions, the pupil is dressed in his usual clothes. The graduation exercise, however, comes only once in their lifetime to most pupils. If they are in cap and gown, they, as well as their friends and relatives, will always remember this event.

Many schoolmen have concrete examples where underclassmen look with earnest longing toward the time when they can appear on the platform dressed in a cap and gown and receive their diploma. Often this has been an added inducement to keep them in school.

Don't Hide Your Light

EARL HUTCHINSON

High School Principal, Brewer, Me.

PRINCIPAL SMITH worried: Town meeting was over and the school appropriation had been cut. He knew that many taxpayers, feeling bitter after several years of depression, thought his salary was larger than the town could afford.

The newly elected member to the school board was more or less a stranger to Principal Smith. The fellow lived out on the crossroads and was labeled as a conservative, opposed to several of Principal Smith's innovations.

These two events might be construed as omens. Before the new board met to discuss contracts for the ensuing year, the friendly superintendent of schools asked Principal Smith to write a report of the year's activities in the high school.

"It would be a good thing," he said, "to let the board know what you are doing."

So Principal Smith spent another evening at his desk compiling a record of his school's activities.

Principal Smith Is Puzzled

His superintendent took the document with a smile of appreciation. That same evening the board met, so it was with considerable eagerness that Principal Smith met his immediate superior on the morrow. This worthy gentleman was affable, indeed too genial, in his greetings.

"Well, Bill, you're with us another year!" he jovially hailed.

Principal Smith inwardly felt that a natural conclusion, but he smiled appreciatively, as was expected of him. After a few more banalities, he rather timidly asked, "Was anything said about salary?"

The superintendent smiled an instant. "Yes," he admitted. "You know people around here are pretty well hit by low prices on potatoes and our new board member wanted to cut salaries, particularly those higher up on the schedule. The board finally voted you the same salary."

Principal Smith felt weak. He had anticipated a raise. "Didn't they like

my work? Haven't I done a good job building up this school?" he ventured.

"They finally thought so, but most of them don't know much about your work or they don't understand it. You should mix more and let people know what you're doing. Now, old George believes a man's worthy of his hire; but you've got to sell him the idea you're worth it. Cheer up! Maybe conditions will be better next year."

As that conversation buzzed through Principal Smith's head during the next few days, he began to realize that perhaps he had been lucky to be reelected. It was not what the superintendent said; it was his unnatural joviality. Perhaps the principal did come near going out the back door. He guessed it was the superintendent plus the principal's report that had turned the tide.

Principal Smith prided himself upon running a progressive school and he had considerable professional pride. This episode was truly a jolt to him. As he sought causes of his possible trouble, he remembered the advice of his superior officer, to sell his school and his activities to the people. As the days went on, he was attentive to rumors, and he spent more time than usual with his friends. He discovered that they knew little of his objectives, and they welcomed opportunities to question him about affairs of the school.

He Resorts to Publicity

He began to read articles concerning school publicity. When the befuddled Mrs. Currie, correspondent for the county paper, had called him on the phone, hitherto he had just a single item for her, and invariably this was confused when it found its way into print. This procedure changed. He took pains to write the school news each week. This was not adequate so he appointed an

English teacher to head a press club composed of superior pupils who met twice a week to write the news. Since the pupils' names were attached to their articles, there was considerable news gathering activity. Reports of plays, speaking contests and faculty meetings began to take life. Soon there appeared a whole column in the Saturday edition labeled "Swampgrass High School News." The camera club infested the school and soon the big daily was carrying a picture a week about some school activity.

Newspapers Not Sufficient

Still, he reflected, there were many who did not read this newspaper, which was the only one that had an extensive circulation. Somewhere, he had run across the idea that pupils were the most patent advertisers of the school. So Principal Smith got his student council to canvass the town on reactions of citizens to school policies.

Finally, as report cards were going out one period, he wanted to ask the consent of all parents to give the skin test for tuberculosis. He received more responses from this query than from any other report he had made. When the next report card was issued, he enclosed a mimeographed sheet, explaining the physical education program. Again, the comments he heard impressed and inspired him. From then on, he had a bulletin with every report.

This incident should end with a raise for Principal Smith but the year has not rolled around yet. Still he did obtain encouragement, for the new school board member stopped in Principal Smith's office one afternoon. He stayed an hour. Principal Smith was no longer apprehensive, but confidently explained the aims of his school. The crusty old gentleman complimented him on what he was doing. Principal Smith swelled with relief and pride and sagely remarked, "At least we're trying to do something that will truly meet the needs of the boys and girls of this town."

Greenville Builds a Plant

RAY L. HAMON



Above: The foods laboratory is a part of the home economics suite on the third floor, which occupies that part of the west wing facing the courtyard. It includes a dining room, laundry, clothing laboratory and a classroom.



Above: The well-lighted and acoustically treated cafeteria dining room on the first floor has a capacity of 400 pupils. Right: Southeast view of the exterior of the Greenville High School before completion of the landscaping.

THE new senior high school plant at Greenville, S. C., is representative of cooperative planning. Architects, engineers, public officials and educators worked together to the end that the youth of Greenville now attend school in one of the best planned plants in the country.

The first unique feature of this school was the unusual way in which it was financed. The bonds were voted before the economic depression, while the public mind was favorable to expansion. The building was not started, however, until the country was deep in the depression. Then a dollar bought more building and, in addition, the federal government provided a 45 per cent P.W.A. grant. Thus, a 1936 local dollar built a great deal more building than could have been erected for two local dollars in 1929.

By eliminating waste space and useless decoration, this plant was designed for maximum service for a minimum investment. The building cost \$420,000; the equipment, \$65,000, and the land and landscaping



That Is Wisely Planned

School Building Consultant
George Peabody College

will amount to about \$25,000. This half-million-dollar plant affords adequate accommodations for at least 1500 pupils engaged in a well-balanced, comprehensive program of modern secondary education. The building represents an investment of \$280 per pupil and the total plant has been provided at a pupil cost of \$340.

The new school is located on a beautiful 13 acre site overlooking the city. This land was formerly occupied by two old Colonial estates. More area would have been desirable but a larger level tract was not available within a reasonable distance. The site chosen is centrally located, which is a distinct advantage for a school that must serve the entire city.

In planning the structure the primary requisite was that the building and equipment should constitute a functional plant for education.

A careful study was made of enrollment trends, curricular changes, administrative policies and teaching methods before the space require-

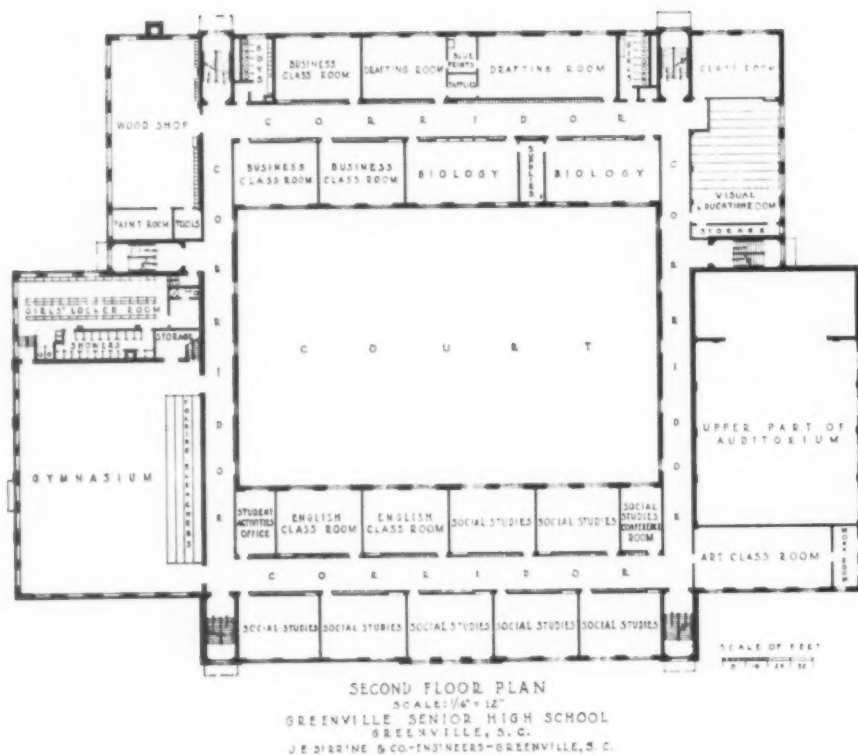


Above: Although the library is 56 feet wide with windows on one side only, it has adequate daylight on all tables from a 6 foot, north saw-tooth skylight running the full length of the room. It is acoustically treated also.

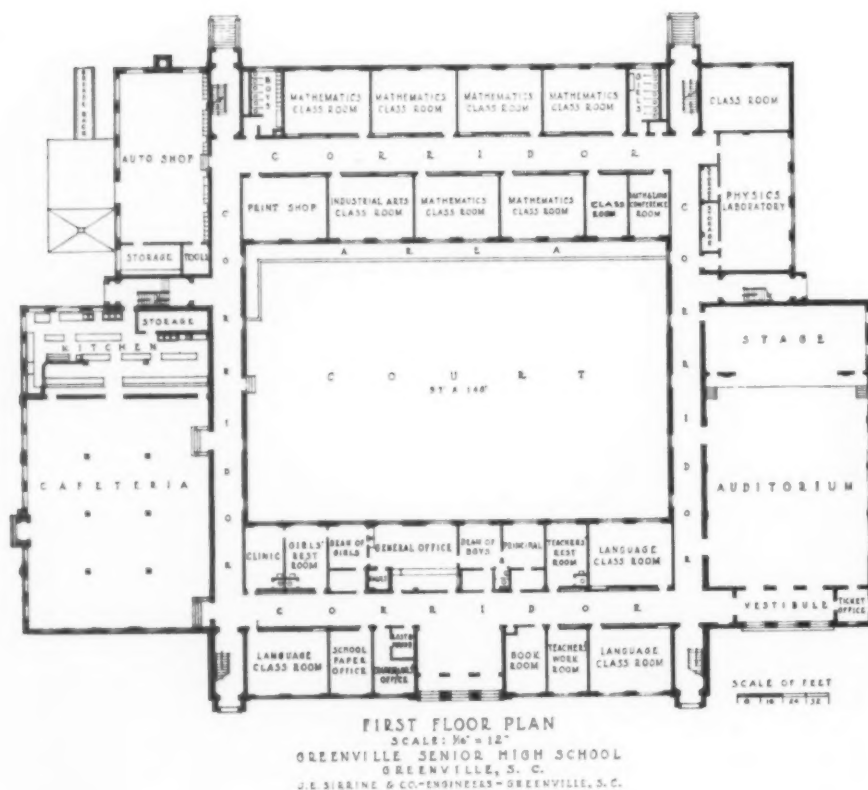


Above: The small, attractive auditorium is designed as a dramatics laboratory. The stage is large and may be entered directly from the corridor so that adjacent rooms may be utilized for dressing purposes. Its capacity is 620.





Above: The main features of the second floor are the 120 capacity visual education and lecture room, a fine arts laboratory and two drafting rooms. The gymnasium starts on this floor and extends to the roof of third floor.



Above: The new Greenville High School is built on the hollow-square plan around an open landscaped court. The east and west wings are devoted to classrooms; the north wing, the auditorium, and the south wing, cafeteria.

ments of the plant were listed. The proposed space allotments were checked with the administrative staff, department heads and teachers before proceeding with preliminary sketches of floor plans. These sketches were rechecked with the teaching staff and details agreed upon for the built-in features and equipment in the various departments.

Although economy was considered throughout all of the preliminary planning period, it was inevitable that some final concessions had to be made to the budget. These reductions and economies were made where they would detract least from the educational program. Before proceeding with working drawings, the plan was changed from two to three stories, the auditorium was reduced from 1200 to 620 and one of the two proposed gymnasiums was omitted. This last concession was made in light of a mild climate, outdoor play space and a large recreational area which was provided under the rear portion of the building at little additional cost.

The new Greenville High School plant is built on the hollow-square plan around an open landscaped court, 97 by 148 feet. The east and west wings are devoted to classrooms with east or west light. The north wing contains the auditorium, library and science laboratories. The south wing is devoted to the cafeteria, gymnasium, dressing rooms, industrial arts shops and the music department. Continuous 12 foot corridors on all floors and six well-placed stairways facilitate pupil circulation and reduce the traffic problem to a minimum.

The instructional space consists of 36 interchangeable classrooms, 22 by 30 feet, four shops, four science laboratories, two household arts laboratories, three commercial laboratories, a 120 capacity visual education and lecture room, a fine arts laboratory and two drafting laboratories.

The cafeteria consists of a well-lighted and acoustically treated dining room, with a capacity of 400 pupils, and a 30 by 64 foot kitchen.

The recreational facilities have been provided on the basis of a physical education program for all. The 64 by 80 foot gymnasium is supplemented by a large ground floor play

area as well as outdoor play courts for tennis, volley ball and soft ball, in addition to the regular varsity fields. The large locker and shower rooms are designed with locker and shower facilities for classes of 60 pupils, and individual gym suit lockers have been provided for the maximum building enrollment. The music department consists of a large chorus and band room, a music library, an instrument room and an office.

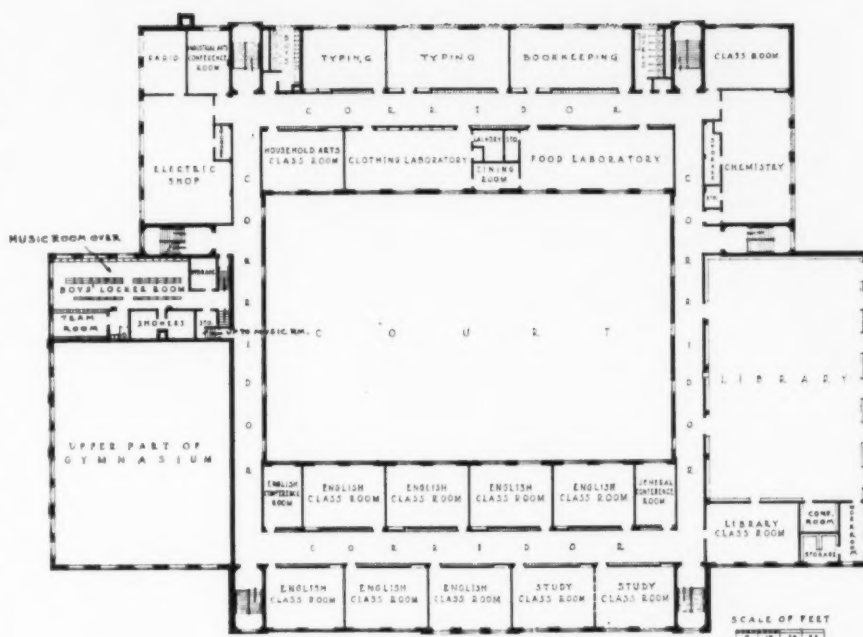
The auditorium, with a capacity of 620, is equipped for sound pictures, has velours draped windows and is acoustically treated. The large stage may be entered directly from the corridor so that adjacent rooms may be utilized for dressing purposes.

The library is one of the unique features of the Greenville plant. It is 56 by 88 feet and is provided with conference room, workroom and storage facilities. The corridor along the full side of the library prevents traffic congestion. Although this room is 56 feet wide with windows on only one side, it has adequate daylight on all tables. This is accomplished by a 6 foot, north saw-tooth skylight running the full length of the library.

Five departmental conference rooms, 15 by 22 feet, provide space for teacher and pupil conferences, thus releasing classrooms for their maximum utilization as instructional space. The administration layout consists of a general office, principal's office, office for the dean of girls, office for the dean of boys, teachers' workroom, teachers' rest room, girls' rest room, clinic, book room, school publications office, student activities office, a lost and found office and a counselor's office.

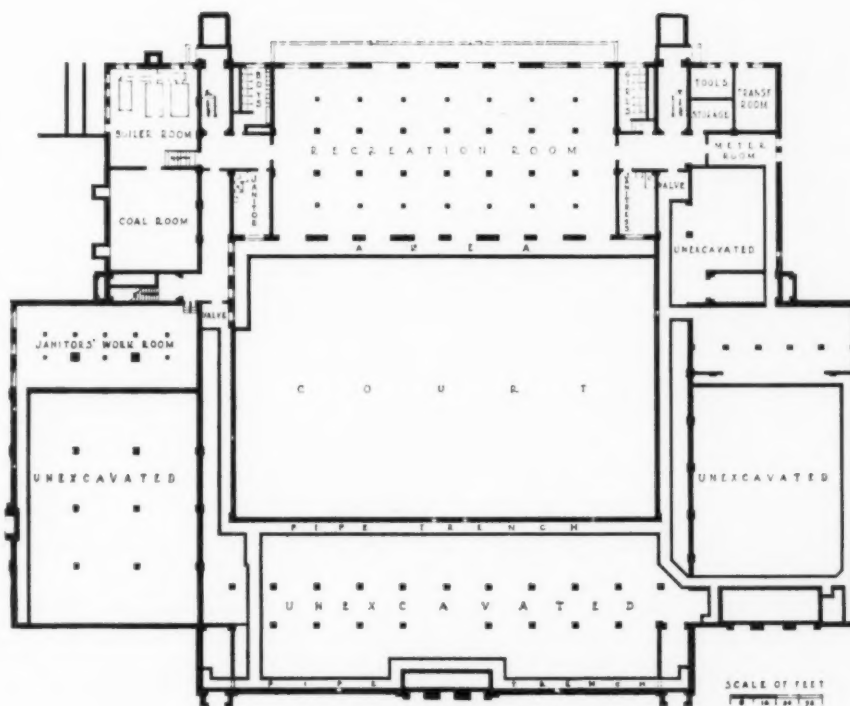
Each instruction room in the Greenville building has the minimum blackboard, ample tack board and built-in features especially designed to accommodate its materials and supplies. The equipment throughout is of the informal type designed for maximum pupil participation.

Greenville is justly proud of its new high school plant. It is believed to represent a wise investment of the taxpayers' money and is a functional plant for Greenville's educational program.



THIRD FLOOR PLAN
SCALE: 1/8" = 12"
GREENVILLE SENIOR HIGH SCHOOL
GREENVILLE, S. C.
J. E. SIKKING & CO. ENGINEERS - GREENVILLE, S. C.

Above: The library atop the auditorium wing is 56 by 88 feet and is provided with a conference room, workroom and storage facilities. The corridor along the full side of the library prevents congestion when the bell rings.



BASEMENT & FOUNDATION PLAN
SCALE: 1/4" = 12"
GREENVILLE SENIOR HIGH SCHOOL
GREENVILLE, S. C.
J. E. SIKKING & CO. ENGINEERS - GREENVILLE, S. C.

Above: Much of the basement area remains unexcavated, leaving space for future expansion and for omissions made as final concessions to the budget. Economies were made that would detract least from the school program.

Chalk Dust

COMES the month of June with its breath of summer, its roses and its marriage licenses. Comes June, but the school executive neither sees the beauty of the garden nor hears the cooing of the doves. For his mind is on greater matters and he wears the harried look of a man who faces too many events in too short a time.

For on the first day of the month, the schoolmaster kisses his wife and his five children a fond adieu and betakes himself to his school. Experience has taught him that he shall not see daylight again until the gladsome Commencement hurrah is past.

On June 1 his board meets for the annual inquiry into the physical state of the schools and he must talk in learned tones concerning floor polish, hedge trimming, boiler compounds and many other summer renovations concerning which his knowledge is far too meager.

FINAL examinations sweep upon the school like the seven plagues. There is great ado amongst the students and, behold, that one fails and this one does not pass because during the entire year they have followed slothful habits and done evil in the school. Fond Mothers stand over the school executive; he stiffens his spine, saying, "They Shall Not Pass," knowing well that these will be his last words for many weary hours to come.

And so he sitteth down to sign diplomas and he signs steadily until the ink blots and the hand trembles and, alas, the voters will say: "Why does not the school teach legible writing? Even the Boss cannot inscribe his own name. To what pass has our good old curriculum come?"

During the diploma signing, the superintendent looks at one and another of the names of those who will be graduated and verily his conscience bothers him and he mutters: "The college profs will think I am balmy when they get this one." Which,

indeed, they do and, in truth, he may be.

As the month stumbles to a weary close, comes the day of graduation. There is a deal of pother as to who will sit where and other important decisions but, at length, the show goes on, the school orchestra stikes up "Pomp and Circumstance" and the graduates march in. But, look ye, if the Boss paradeth with the class in his collegiate robes, the audience cries out: "He loveth the spotlight and stealeth honors from the children." But if he stayeth behind in the vestibule, they say: "Whattamatter! Is the fellow ashamed of his handiwork?"

THE Commencement Orator, who comes from a near-by institution of higher culture, handeth out a great deal of bunk and the parents nod their heads and say: "Oh, if we only could afford such a one as head of our schools!"

The Commencement Day is hot and sticky and the children of tender age raise a cry and altogether it goeth off rather poorly.

But when it is over, everyone is proud and well satisfied and they say: "The old man isn't so bad after all." After which the world dozes in the heat of the July sun while the boss turns to his annual reports with a satisfied sigh.

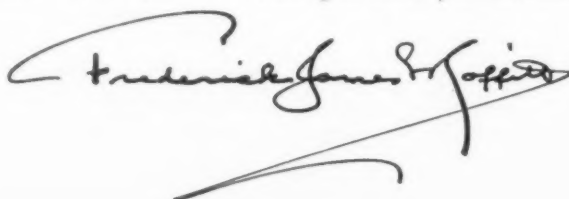
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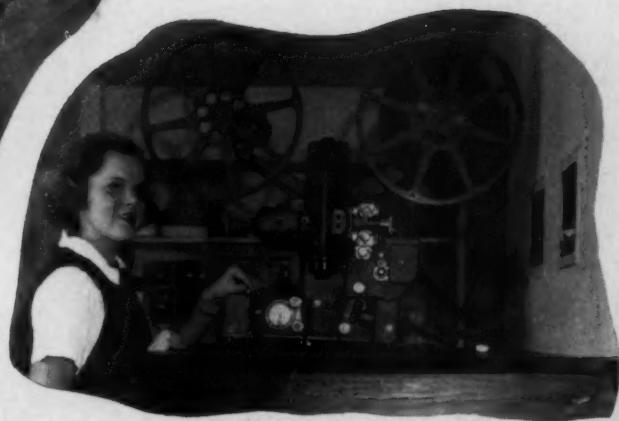
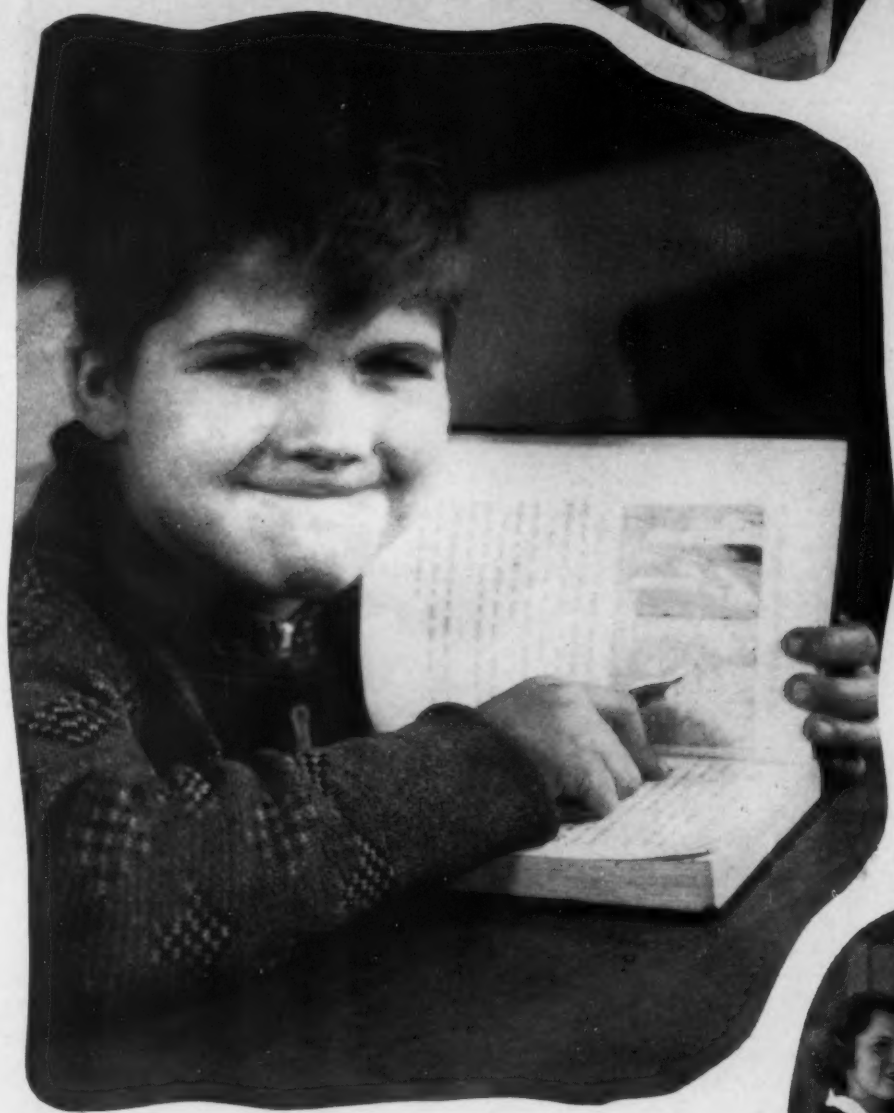
Oh, I wish I were a Bookman
With suave and gracious looks
With smiles for each stenographer
With lots of sample books.

Oh, the Bookmen, the Bookmen,
They greet us with a shout.
They know when Jones is slipping
Why Smithers was let out.

They know the latest gossip
Just who will "get the hook."
They go their way; to our dismay
We've bought another book.

Oh, the butterfly has golden wings
The lightning bugs, a flame;
The Bookman has the gift of gab,
And gets there just the same.





Portfolio of
VISUAL AIDS TO EDUCATION



Variety in Visual Aids

LEO D. BROWN

Director of Visual Education, Clare, Mich.

ONE of the first things to be done in organizing a visual aids program is to educate all the teachers in the use of materials that they have at hand. Many teachers are doing a remarkable job of teaching, using only pictures taken from magazines and books as a basis of subject study. Any teacher can use this type of help and it is a stimulation to pupil activity in the subject. Many textbooks are chosen today for their illustrations as well as for their content. Maps, charts and chalk work are still important in classroom work, but much more can be done with them.

The common types of visual aids are motion pictures, glass slide projectors, film slide projectors, opaque picture projectors, the stereoscope with stereoscopic pictures, maps, charts, blackboards, museums, models and pictures selected from many sources.

Motion pictures present subjects in motion and sound in which both of these mediums are necessary for full understanding of the subject. Slides of both types are valuable in any grade or classroom, principally because the picture can be made large

enough for all to see easily and can be left on for a period of time for detailed study and discussion. The opaque picture projector is useful for projecting any small picture in a proportion that all may see easily. The stereoscope, with its third dimensional pictures, also comes in for its share of credit in presenting material to the pupils.

Museums are valuable for life study but most schools have none. Possibly the solution to this will be met by the state through traveling exhibits similar to those used in our larger cities today. Models are available from supply houses but are too expensive at present for small school usage.

The aim of a visual education program is to present material in such a way that pupils will get more easily and completely an understanding of the subject matter. When we consider that practically all primary work is done through the medium of visual material, it is reasonable to assume that this will carry over to the advanced work and pupils in the higher grades will get more from

their subjects when presented in this manner.

Visual education may be divided into two general divisions. The first is that type which may be presented advantageously to the whole group at one time. To do this the school must have an auditorium or a gymnasium large enough to seat the entire group. Some subjects that may be presented in this manner are safety, health education and propaganda against the use of alcohol, narcotics and tobacco. The second division has to do with all the general school subjects that can be dealt with most effectively in the classroom itself.

The success or failure of a visual education program depends entirely on the ease with which it may be used. Some teacher should be designated as the director of visual education. In choosing the individual, the superintendent should be careful to select someone who has an interest in this type of work. He may prepare himself for this work by attending meetings, conventions and summer school courses. Books and

periodical literature are available in abundance.

The director should have charge of the central location of supplies and should supervise all other work in this field. Under his direction four branches or subdivisions may be located. There can be one each for the early elementary division, the later elementary division, the junior high school and senior high school.

There are three reasons for this system of division: (1) the material will follow the mental age of the pupil through school; (2) it is easier for the teacher to find material for use in her respective subjects or grades, and (3) it prevents overlapping of material.

In a small school system only one motion picture projector is necessary. This should be of the sound-on-film type. When equipped with microphone and phonograph turntable, it can be used to show both sound and silent pictures and to assist in speech classes, music appreciation classes and school parties. It also can be used as a public address system. This type of equipment, although slightly more expensive, will serve not only the school but the community. In many cases it will pay its own way.

Each of the four central units should have access to the motion picture projector. In addition, each should have a glass slide and film slide projector and an opaque picture projector. Each should have a stereoscope and a set of stereoscopic pictures as well as maps, charts and pictures selected from many sources. This will make each type of aid readily accessible to all grades.

Many schools make the mistake of having only one room prepared to show pictures, and all grades are expected to use it. In most cases this room is little used because of the trouble involved. A better plan is to have accommodations in each room for showing pictures.

Each classroom needs a considerable amount of blackboard space. Too much is better than not enough. It should have its own projection screen and a large bulletin board. There should also be an electrical outlet in a convenient place.

The program of visual education will take a few years to mature. The cost will be divided among these years, making the annual budget relatively low for a long period.

Practically all primary work is done through the medium of visual material. It is reasonable to assume that this will carry over to the advanced work. Pupils in the higher grades will get more from their subjects by means of a visual aids program.



The cost can be kept down by purchasing only the material that is actually needed and equipment that can be utilized in many ways. One good rule to follow is: "Buy compact equipment." If it is easy to use, it will be used, an essential factor to the success of the program.

The director should check all supplies, have charge of all borrowed material and should catalog the source of all materials not in the

school. The teachers could check through the files of this office for material needed and then inform the director of the date it will be needed. In turn he can work out the annual schedule of visual aids to satisfy all grades and departments. This schedule should be set up early; it is advisable, if possible, to order at the close of one school year for the next. This initial schedule can be supplemented easily if necessary.



A type of visual education that is most effective in the classroom.

When and How

THE radio, press and motion picture all are aiding in the rapid dispersion of news concerning political and economic events. Newspapers, carrying headlines of war scare proportions, are found in most homes; radio interviews with leading political dignitaries in foreign countries can be heard at all hours; while the camera continues to reenact for us the outstanding events of the world as they take place in Europe, Asia or Latin America.

The world is no longer a group of isolated continents, each made up of numerous self-sufficient countries. Instead, it has become a neighborhood of nations, seeking ways of permanent peace and brotherly love. Boys and girls are constantly made conscious of major crises that threaten this peace. They are reading newspapers and periodicals, watching the newsreels with interest and "tuning in" programs on current events. Thus, they are acquiring an abundance of factual information which, if well used, makes an excellent supplement to the elementary and secondary classrooms. A teacher who acknowledges this interest in current world problems and makes her classroom a laboratory for the partial solution of them finds she has opened new vistas of thought she never knew existed.

Educators have recognized the necessity of maps, globes and charts as part of elementary and secondary classroom equipment and in the teaching of social sciences, but few have acknowledged their place in the teaching of other elementary subjects. Yet literature, English and natural sciences are far more meaningful when they have been enriched by thoughtful reference to cartographic tools.

This does not mean that the reading teacher must assume the sole responsibility for training her pupils in the interpretation and use of maps and charts, but it does call for constant reference to them when they will in any measure clarify the printed page. Frequently pupils have read fascinating stories of far off lands without the slightest notion of where they are located. Sometimes they have been asked to write a

paragraph for English on "The Silkworm, Our Friend," and have shown little interest because physical-political maps of Asia and charts showing the life cycle of the silkworm, as well as comparative production and consumption of raw silk, were not readily available. Many natural science teachers have been known to teach the migration of birds without a blank outline map of the world on which the routes of migration could be traced.

Why have teachers of other elementary subjects failed to make use of these visual aids? Some have failed because they have linked these tools with the social sciences so long that they do not recognize the potential value of them to their own classroom. Others have passed them by because they regard them as tools that require an abundance of knowledge and skill in use. These teachers are not "at home" with them.

Most courses of study call for the introduction of formal geography in grade 4, and this is the logical place

for the initial study of maps and globes. If any use is made of them in the primary grades, it should be no more than an attempt to show the location of a city, country or body of water in response to a child's request.

In grade 4, however, there should be an interpretation of symbols that represent land, water, cities, rivers, lakes, canals, mountains and sun lines. The child also should learn to use these symbols in worth-while relationship thinking.

Simplified physical-political maps and globes are suggested for use in grade 4, because they contain only the most important natural and cultural items. Maps cluttered with place names tend to confuse the child and should be reserved for higher grade levels. Color layer denoting elevation is more complicated and should not be introduced earlier than grade 5.

In grade 5 the pupil is already familiar with the major map symbols and is now ready to meet and relate

A teacher who acknowledges the widespread interest in current world problems and makes her classroom a laboratory for the partial solution of them finds she has opened vistas of thought she did not know existed.



to Use Maps

MYRTLE SEXAUER COBB

these symbols in new settings. Therefore, the fifth grade pupil should use many maps. The following list suggests the outstanding ones. As each is presented for the first time, there should be a carefully planned method of familiarizing the pupil with the idea behind the map.

1. Color layer maps showing elevation by contours.

2. Maps showing political divisions in colors. (These are suggested particularly for history, literature and English classrooms where place geography is of primary importance.)

3. Regional maps showing the distribution of rainfall, temperatures, growing seasons, natural regions and types of work.

4. Dot and line maps showing the density and distribution of natural and cultural items.

5. Detailed county and city maps, as well as government maps, are suggested for use in the upper elementary grades.

Each time a map symbol is to be introduced, the teacher should make

certain that a picture behind the idea for that symbol is clearly visualized. For example, the child should see pictures of a river taken in the air at various elevations above the river to grasp the idea that the higher one is above the river, the narrower and longer it becomes. He will then accept the theory that if one could be high enough above the river he would eventually see its banks converge into a wavy line. Thus, a black wavy line on the map takes on new meaning for him.

No charts, except those of a purely pictorial nature, should be introduced before grade 5. The first charts to be used at this level should be of a semipictorial nature. This means that the symbols used to represent comparative statistics should recall the item symbolized. Ears of corn might represent production and consumption of corn; heads of cattle, sheep and swine might be used to compare animal statistics.

When bar and line graphs are presented, they should be a gradual out-

growth of the more easily understood semipictorial charts. Pie graphs require a knowledge of percentage for complete comprehension. Therefore, they should be reserved for use with children in the upper elementary grades.

Maps, globes and charts can be made a vital part of the unit for purposes of motivation, assimilation, application and testing.

For motivation, these tools will often lead the pupils to raise worthwhile problems.

For assimilation, boys and girls will learn to turn automatically to maps and charts for firsthand information when they are assimilating data for the solution of a problem. Frequently, it is worth while to prepare guide sheets that will enable them to undertake an independent study of these tools in a systematic manner.

For application, blank outline maps and charts provide an excellent opportunity for the pupil to create meaningful pictures with the data that he has accumulated. It is not worth while to copy maps and charts from textbooks but, if the pupil is encouraged to create a new map or a new chart by uniting and relating information found on two old ones, he has carried through a purposeful activity.

Countless maps and charts that show the distribution of physical and political items may be made but none is worth making unless it is to be used.

For testing, maps and charts are gaining recognition, although there is room for considerable improvement. The only real way that a teacher can measure a pupil's ability to read, interpret and use them is to formulate tests that actually employ their use.

A series of dot maps showing the distribution of numerous farm products in the United States might be placed on a chart. Labels identifying the products should be covered. It then becomes the pupil's problem to identify each map as one showing the density and distribution of corn, wheat and dairy products.



The necessity of maps, globes and charts as part of elementary and secondary classroom equipment is well recognized in the teaching of social sciences, yet few educators have as yet visualized their place in other curriculums.

In the Small

JOHN J. DALY



Left: Seventh grade boys threading a motion picture projector. Below: Two third grade boys setting up the lantern slide projector.

FOR generations teachers have used blackboards, maps, sand tables, pictures and charts and they are still vital aids. One of the earliest forms of mechanical teaching aids was the stereopticon, now commonly called the lantern slide projector. It is one of the finest mechanical types of aids. By the use of photographic slides the teacher can visualize places and events from all parts of the universe. Many sources of slides are available and this type of equipment may be used by great numbers of teachers at little expense.

In addition to the usual slides, specific interests are aroused by the use of such homemade slides as etched or ground glass, cellophane and silhouette slides.

Of these, the ground glass is most usable. It can be made by the pupils from plain glass if funds are limited. It is successfully used in the schools of Port Washington, N. Y., by children of the first grades and all the way up through high school. Illustrated matter may be made on it with lead pencil or India ink and colored work may be created by the use of a special translucent type of crayons and of colored inks. The finished slide may be kept permanently or may be washed off and used over and over again. There are psychologic

values in the use of pupil-made slides that cannot easily be achieved by any other medium of instruction.

Closely related to the lantern slide projector, both in teacher value and longevity of existence, is the stereograph; the good old stereograph, the visible stamp of culture and refinement in the parlors of our grandparents! By looking at the stereograph through the viewing device, the stereoscope, the illusion of depth is created and the object is seen in its three dimensional form. It is valu-

able in such work as solid geometry where drawings may be visualized in their real shapes. The last few years have seen the stereograph modernized in that the pictures are placed on film and are viewed through a binocular device. Their cost is quite small.

The 16 mm. motion picture in both the silent and sound types is now accepted as standard for classroom use. The equipment has been improved so that quality of performance may almost be taken as a matter of course. The cost of projectors, though still high, is rapidly being lowered and indications are that they will soon be within the reach of all school systems. In the meantime, the number of available teaching films is increasing and the quality improving.

The use of lantern slides and motion pictures requires that the classroom be darkened, that electrical outlets be available and that a suitable type of projection screen be a part of the room equipment. These things should be a normal consideration of the school architect, but it is amazing to see the makeshift concoctions that have been created even in the new school buildings. In some cases outlets for electrical connections are



School System

Principal, Sands Point School
Port Washington, N. Y.

placed behind lockers and shelvings where they cannot be used or are so high that a stepladder is needed to reach them. Windows are commonly equipped with "lightproof" shades, which are so narrow that light enters on each edge of the window and projection screens are of such material that distortion of the image takes place, causing strain to the pupils' eyes.

Another classroom problem is temperature control and ventilation. When the windows and doorways are covered to exclude light there is often no way to admit fresh air and this is vital in a crowded room.

It does not seem that these and related problems are too difficult for solution in an inexpensive way, but those who are engaged in classroom planning must produce results or teaching practices will be affected. How can classroom windows be made so that they will easily and economically admit, keep out or control the quantity and quality of illumination in the room?

Equipment, to be economical, must be used to the fullest possible extent. Usually it is not wise to purchase a quantity of expensive equipment and thrust it upon the teachers. Better to wait until the teachers experience

Right: Second grade pupils using stereographic pictures, a modern adaptation of a parlor plaything of our grandparents. Below: Pupils using ground glass for slides.



a need for it and think through a plan for its use.

In choosing motion picture projectors it is wise to consider some of the following points: (1) quality of projected picture, illumination and steadiness; (2) silence of operation; (3) quality of sound; (4) portability of the apparatus; (5) ease of operation; (6) safeguards against film damage; (7) service and maintenance of projector; (8) integrity of the manufacturer and dealer; (9) adaptability and multiplicity of use,

and (10) cost and maintenance. Before making extensive expenditures it would be well for the person in charge to survey the local situation. Among the essential things to find out are: (1) curriculum needs; (2) skills and experiences of teachers; (3) extent of possible use in the system; (4) availability of films and other materials, and (5) necessary changes needed in classrooms in order to use equipment.

Most certainly there will be need for in-service training of teachers in the effective use of visual materials and it is only the novice who thinks there is no difference between using films for entertainment and for teaching.

What films should be purchased, what rented or borrowed? This problem must be solved according to the needs of the local situation. It is best to have the teachers help make this decision. It is wise to buy types of films that are standard items in the curriculum and that may have a wide range of use from kindergarten through the higher grades. There is decided value in owning the films because teachers may preview them at their leisure and make definite plans for using them as teaching aids.

In order to get films from rental or free loan agencies it is necessary



to make a schedule in advance. Usually one person in the school system should be delegated to integrate the use of films. Such a person will more than prove his worth if he does his job well. He should know what films are available and pass this information on to teachers. A library file system is needed so that teachers may consult certain topics and find

an evaluated reference to films available. The director of visual aids should carry out the clerical details and arrange for the film to be at the teacher's service when and where needed.

This scheduling and projecting of films may be made a worth-while pupil activity in the junior and senior high schools. Pupils should receive

school credits for service activities in the same way in which participation in other school activities is rewarded.

In the elementary school pupils from the third grade up have proved adept at setting up and using lantern slide projectors, and fifth and sixth grade boys are efficient in the operation of motion picture equipment. Of course, the teacher should possess adequate skill in handling all kinds of classroom equipment but it is reasonable to expect that she could be more effective in the teaching situation if she had the cooperation of pupil helpers.

The Port Washington school system has three elementary schools and a junior and senior high school. Each school is equipped with or has easy access to the following equipment: (1) stereographs; (2) radio; (3) lantern slide projectors; (4) state distributed slides; (5) 16 mm. motion picture projectors, both sound and silent; (6) duplicating equipment; (7) film strips and projectors; (8) opaque projectors, and (9) adequate maps and globes. Library facilities are being improved. One elementary school has a file of 15,000 mounted pictures that are cataloged and easily available for use. Supplementing this are card files of activity units and a topical index for teachers' use. A catalog of school films is under way, which will be combined with the library instructional materials.

The teachers of speech have been recording the voices of pupils with speech defects as instruction is carried on. Both teachers and pupils can measure their progress when early recordings are played back. Moods in music are dramatized in action or pictures by pupils in the primary grades. School-made films record teaching and pupil activities. A project in local history is under way through the medium of photographic lantern slides. This will probably be supplemented by motion picture recordings of a social studies nature in the near future. Art, industrial arts, nature, music, science, current history and travel, all these and others, too, find important uses for visual aids.

What are the essentials to know in guiding a visual aids program? Everything that has been said and then one thing more—proceed slowly! Don't go faster than you can take people with you!

School Movies Serve Community

C. R. CRAKES

Senior High School Principal, Moline, Ill.

THOSE of us who are endeavoring to provide American youth with the best of everything in the way of an educational program have been watching with some jealousy and much interest the progress of the motion picture industry. We feel that motion pictures should be a tool of the schools, but there are some indications that they may come to dominate the educational program.

In an attempt to harness and make use of this stimulating educational aid, school authorities at Moline, Ill., started in 1923 to develop a visual instruction program. The result is a fully organized visual instruction program which starts with the first grade and carries through the senior high school.

Elementary schools are equipped with 16 mm. motion picture projectors and with stereopticon projectors. The senior high school has sound and silent equipment for 16 mm. films and a silent film projector for 35 mm. films. The high school is also equipped to produce 16 mm. motion pictures both in color and in black and white.

The senior high school has a projection room and a well-organized program of visual instruction. All visual aids are closely correlated with the regular instructional material used in classes. Films and slides are ordered several months in advance so they will arrive when they can be used to the best advantage with the subject matter.

Citizens of Moline are aware of this visual instruction program and are willing to support it financially. As a part of the work 1000 feet of motion picture film was produced

depicting various classroom activities in the high school. With lighting equipment purchased especially for this purpose, we now are able to go directly into classrooms and photograph actual teaching situations.

This first film, taken about three years ago, has been shown to the general public on various occasions. We are now ready to launch another project, 800 feet of film in color. We expect to benefit by mistakes made in the first enterprise and to produce a more interesting picture. This film will be shown at various public meetings throughout the community.

A project like this is not expensive once a school owns or can rent a good motion picture camera and the necessary lighting equipment. All these tools may be purchased with funds either provided by the board of education or raised by means of some social or dramatic entertainment.

During the last two years our school equipment has been used to produce two pictures depicting local civic activities. The first is 1100 feet in length and the second, 900 feet. Both show various types of civic projects, particularly the work of the city beautification committee of the local association of commerce. The films are in color. The first film, produced early in 1937, was shown to 25 groups at Moline and near-by communities.

School projectors and screens are used in showing these films. These projects are helping to emphasize the fact that the schools belong to the public. This fact in itself warrants considerable expenditure of time and money on the part of the school administration.

In the Rural School

J. D. MacCONNELL

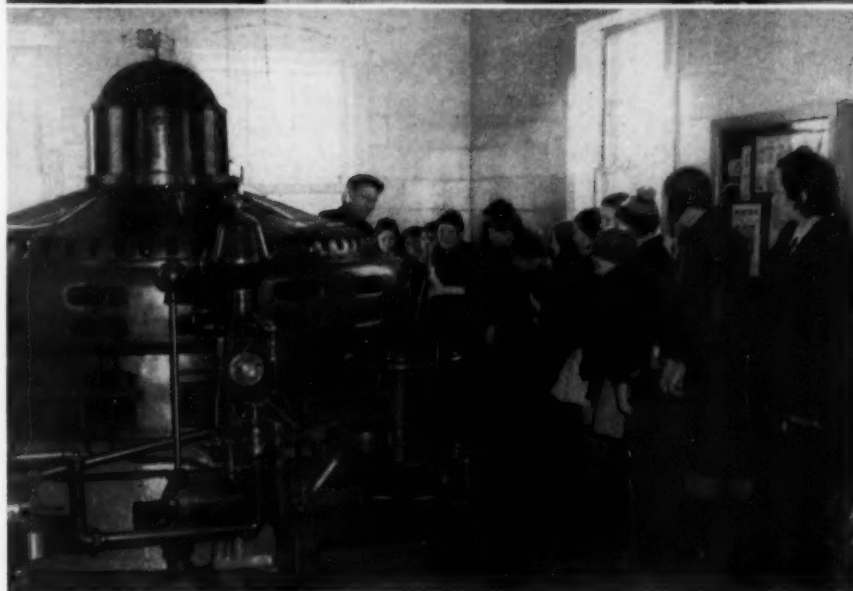
Superintendent, Rural Agricultural School, Beaverton, Mich.

IN ORGANIZING a visual education program in a rural school system it is necessary to familiarize the staff with the meaning of the words "visual and auditory education." It must be understood that visual education is not a method of instruction but that it is the use of all kinds of objective materials in instruction.

In the Beaverton Rural Agricultural School, Beaverton, Mich., the art teacher develops the visual education program to correlate with the work in the various classes. Drawings, sketches, clay models and soap carvings are utilized. Practically every teacher in the system is making use of the project.

The first grade room in a recently completed farm unit has proved that the project is a practical unit for grade children. Farm pictures were placed about for discussion and observation. The story of "The Little Red Hen" was being read from their readers. This brought up the matter of modern methods of threshing and gave rise to a disagreement as to where the seeds came out to be bagged. Fortunately, a near-by farmer was threshing that day, and the youngsters were taken over to see the actual process and to settle their argument. Seeds were brought back and planted in the sand table.

When the children in the third grade were studying pioneers, they drew original pictures portraying various scenes of pioneer life. They made a covered wagon and a spinning wheel. Through this type of project, the children gained a concept of these things about pioneers: (1) home life; (2) home manufac-



Top: The art teacher develops the visual education program to correlate with the work in the various classes. **Center:** Since these second graders could not visit the zoo, they made their own zoo. **Right:** Beaverton pupils on a class journey to a hydro-electric plant.



The children in the fourth grade social studies class wished to picture in some way the lands they had studied. Each child put down his own ideas and from these the children made one large poster representing a scene along the Nile.

turing; (3) early travel, and (4) early life in Beaverton.

In the fourth grade social studies class, the children wished to picture in some way the countries that they had studied. Each child put down in graphic form his own ideas and from all of these the children made one large poster representing a scene along the Nile. Some of the children wanted to dress dolls to show how the people clothed themselves.

When the fifth grade was discussing modes of travel in social studies someone suggested making pictures to show the development of transportation in the United States. The children were divided into two groups, one taking land and the other, water transportation. Each group searched through books on this subject. After listing the steps in the development of transportation, each child chose a phase to illustrate in crayon. The best pictures were chosen and painted in poster paint by committees. The finished pictures, with dates, formed a frieze around the room. Through the study necessary to make these pictures and

a model of a Viking ship, the children gained a concept of the slow progress in transportation.

The sixth grade made a journey to the local power house to get some general information as a basis for their study of hydro-electricity. The children were made conscious of the hugeness of the machinery, the excessive power developed by the dynamos, the intricacies of switches and the great amount of knowledge and experience necessary skillfully to operate a plant in which so much apparatus is involved. This trip inspired the children to make further study of the manufacture and use of electricity.

The sixth grade has the advantage of having a radio in the room. The radio contributes vastly to the child's knowledge of present changes in the world through news broadcasts.

In the ungraded room, developed handicrafts provide the child with something in which he can excel. Some of the articles made were: leather purses, wall plaques, hot dish mats of wood decorated with metal foil and hand carved boxes.

The sound motion picture is rapidly becoming a part of the auditory and visual education program of the Beaverton school. The recently completed junior and senior high school building has a room equipped with dark shades.

The chemistry class has found use for such pictures as "The Wonder World of Chemistry" and "The Making of Glass" as aids in their classroom work, while geography pupils have a keener conception of season, erosion and the earth's formation and topography after seeing "The Work of Rivers" and "The Earth in Motion." The film "Beetles" pictured for the biology class the life cycle of the beetle. New methods of preparing and serving citrus fruits were obtained by the girls of the home economics classes by the picture "Citrus Fruits."

The seventh grade geography class enjoyed a trip through Mexico through the medium of the motion picture. This is representative of the films used in regular classroom work.

A general program is given once each month of the school year. The films are rented from commercial companies and are scheduled for a year in advance. Such pictures as "Little Men," "Black Beauty," "Jane Eyre" and "The Old Curiosity Shop" give the pupils an opportunity to see in picture many of the books that they have read. They may visualize how Sir Francis Drake in the picture, "Drake the Pirate," sacked rich cities for gold and silver, and how he defeated the Spanish Armada and made England mistress of the sea.

For their entertainment value such pictures as "In Old Santa Fe" and "West of the Divide" are included in the program. A travelog, a comedy and free films are used to supplement the feature picture of each program.

There is a general admission of 10 cents per pupil to each of the monthly programs. Approximately 70 per cent of the pupils attend. Those pupils not attending the program remain in the library or in homerooms under the supervision of instructors. The projector was purchased in January 1938 and, by this plan of financing, we have found it possible to rent films and to keep our projector in repair. We completed all payments May 1 of this year.

"Movies" in the High School

HARDY R. FINCH and ELEANOR D. CHILD

English Head, Greenwich High School, and Audio-Visual Director, Greenwich, Conn.

TODAY educators everywhere are recognizing the strong influence that the motion picture exerts on American youth and are organizing activities similar to those sponsored in the public schools at Greenwich, Conn. What is being done at Greenwich High School is being duplicated in part or in its entirety in more than 2000 schools throughout the United States.

The motion picture activities in Greenwich High School may be divided into two groups: (1) classroom activities and (2) extracurricular activities. Frequently the classroom activities are so closely related to the extracurricular activities that they are difficult to separate.

The classroom activities are varied. In the 10A classes five lessons on motion picture appreciation have been developed and used. The teacher who originated this series used the material found in Dale's "How to Appreciate Motion Pictures" in developing the lessons. She discovered that the tenth grade pupils responded favorably to this type of activity. Other teachers who have used the plan or a similar one report comparable results.

Another teacher has worked with eleventh grade pupils in making a comparative study of motion picture criticism and publicity. Press books supplied by the local theater and reviews by leading motion picture critics provided ample material for this study. Many pupils who participated in this activity expressed surprise on discovering that reviews of current pictures varied so greatly in content. They were even more surprised when they discovered that the reviews printed in the local papers were only publicity "handouts" that had been written by press agents many weeks before the films appeared. In another eleventh grade class, the plot of a play studied in



Members of the Photoplay Club examine materials used in a nationally circulated study guide, the first to be edited by high school pupils.

class was compared with the plots of current motion pictures.

In the twelfth grade, acting in motion pictures has been discussed. The teacher in charge of this states: "I found that pupils were eager for something more stimulating than the foundation work that the underclassmen had done. Therefore, I decided to approach the subject from the standpoint of acting. The merits of acting as portrayed in several pictures marked the beginning of an interesting development. I needed only to broach the subject to the class in order to start a heated discussion. 'What movie stars exemplify good acting?' 'Which of two stars is the better actor?' were only a few of the many questions proposed and discussed. Certain standards for judging acting were set up by the group."

In some English classes pupils selected motion picture casts for stories

that they were reading. This has been done with "The Merchant of Venice," "A Tale of Two Cities," "The Return of the Native," "The Crisis" and "The Great Broxopp." The teacher who originated the idea reports:

"The scheme works out very well. All pupils enter the discussion of Hollywood stars to be selected and defend the qualifications of their favorites. Even the minor characters of a story are discussed at length. We often discuss a probable scenario to decide which characters to eliminate.

"Many humorous complications result. In 'The Crisis,' for example, we had difficulty in finding pictures of actors with beards so that they would resemble Grant and Sherman. We finally succeeded in ensnaring some of the outlaws of 'Jesse James' for the parts!"

The high school's creative English class spends a portion of its time

studying motion picture scenarios. An elective course in the motion picture was instituted last fall. The course is planned with the major objective of developing the pupil's appreciation of the motion picture medium. Discussion forms a considerable part of the semester's program. The pupils discuss such thought-provoking topics as "Propaganda and the Movies," "Who Controls the Movie Industry?" and movie censorship and documentary films.

Frequently all members of the class see the same film at the local theater and later review the picture in the classroom from the standpoint of story, acting, lighting, backgrounds and direction. Each pupil receives special training in the use and operation of the motion picture projector and the motion picture camera. Before the semester is completed each pupil is given some actual experience in working "on location" in some particular capacity.

The extracurricular motion picture activities of the high school are centered about the Photoplay Club. It has an active membership of 50 pupils. The club holds meetings once a week and has lively projects. Its committees are numerous, and each one functions. Each member of the club belongs to at least one committee and some members take part in the work of several.

At the regular meetings of the club, a variety of topics relative to motion pictures is discussed. One regular feature of the meetings is a report of the review committee. This group of pupils comments upon the movies that will be shown in the local theaters during the coming week. Although the committee members have not actually seen the pictures on which they comment, they base their judgments on reviews in the "Selected Pictures" list and the "Digest of Motion Picture Reviews." This is followed by a program over

which a volunteer chairman presides.

One of the permanent committees of the club is the bulletin board committee. This group is responsible for the planning and arrangement of exhibits on five hall bulletin boards, situated in various parts of the school building. Many pictures and articles are obtained from newspapers and magazines. Stills, press sheets and trade magazines are collected regularly from the local theater. Posters from Motion Picture Producers and Distributors of America are exhibited occasionally.

Some of the club members are active in library committee work, an important part of the club's program. This committee compiles lists of books on which films have been based and recommends new books on motion pictures to the school and public libraries. Its members are responsible for a special table of motion picture material in the library and are the filing clerks for all movie information collected by the club.

A special committee of pupils is in charge of the running of assembly movies. Three members have charge of adjusting curtains and setting up the screen; two help in the projection booth, and others act as ushers.

For admission to the local theater, the club has obtained special rates for all pupils. The local theater manager has been cooperative in furnishing study guides to unusual photoplays without charge.

One interesting feature of last year's work was the development of a study guide to the motion picture "Tom Sawyer." Six members of the Photoplay Club attended a preview of the motion picture in New York City and aided Mrs. Mary Allan Abbott of Teachers College, Columbia University, in writing a booklet that was distributed throughout the country. The booklet, published by Educational and Recreational Guides, Inc., and sponsored by the Department of Secondary Education of the National Education Association, contained materials that would help the pupil to enjoy the photoplay more fully.

The most active body of club members is the production group. Fifteen members of this division meet once a week after school, and when actual production is taking place they meet more frequently. This group is divided into directors, cameramen,



Well-illustrated books are a part of the library exhibit for "Gunga Din."

lighting experts, scenario writers, editors and a business manager. This year the production group has made two 400 foot news reels of the school's activities, a 250 foot picture of a fifth grade operetta, a film for the local Red Cross, a 700 foot film of the high school news fair for the board of education and an original comedy.

Since the beginning of Greenwich

High School's motion picture activities in the fall of 1934, we have attempted to utilize the wide interest in the motion picture: (1) to develop a more intelligently critical attitude on the part of pupils; (2) to correlate the motion picture with classroom work, and (3) to present an opportunity for practical personal experience in a recognized factor of American recreational life.

The Teacher's Part

CHARLES W. HOFFMAN

Blair Academy, Blairstown, N. J.

THE director of visual aids might well be called an advertiser of superior tools. He should be the first to set an example for other teachers by using visual aids effectively. This involves leadership, initiative and a great deal of extra time. Otherwise the interest in effective visualization will lag and soon die out.

Teachers should be educated by the director to the fact that visual aids vary in quality. There should be some evaluative criteria established by the director for the use of each teacher, and periodic meetings should be held in which discussion will bring out the values obtained by the various aids. Teachers should be shown by the director that effective visualization is independent, to a large degree, of the cost of the aid.

The equipment to be used in different schools varies in the school system. The elementary school, for example, would naturally rely on projection equipment, slide, lantern and postcard projectors; the secondary school, upon its motion picture projector and microprojector. The equipment of other types of visual aids, such as designed materials and graphic materials, varies from building to building.

Unless the director is able to systematize and to localize this scattered equipment, the teachers will be unaware of the equipment outside their own building. This problem can be overcome by having a localized point for all the visual aids contributed by the teachers from the various buildings. The director can send around a mimeographed sheet

listing the availability of the equipment, directions for use and many other pertinent facts pertaining to the aids.

Lack of time often causes a teacher to make eleventh hour demands on the director of visual aids. For example, a play is to be given by the science department and the assembly program director makes this known just a week ahead of time. The teacher in charge is naturally hurried and, as a result, gives little thought to part selection, costume selection and lighting and sound effects, with the result that a disorganized play is presented and the audience is critical.

Lack of knowledge of child psychology is apparent when "flim flam" is presented in the visual aids, instead of sincerity of principle and simplicity of thought. Too many times the walls of the room are plastered with composition papers; the shelves are too full of books; the boards are decorated with too many drawings. Some teachers believe this impresses children when, in reality, simplicity is the keynote of success in the use of visual aids. New teachers sometimes try to outshine the other teachers by these huge displays.

Let us consider another common fault of an undirected visual education program. A film arrives from a manufacturing company that has produced it for its advertising value. The film is not previewed, with the result that, instead of clear-cut principles being presented, the child beholds truck after truck with the manufacturer's name on it moving

across the screen. The child soon senses the fact that there is no connected thought. The ultimate result is dissatisfaction, loss of interest and confusion of mind. Had the teacher been advised of the film or seen it beforehand, this could have been avoided. A much better film might have been substituted which would have stimulated the teacher to further uses of effective visual aids.

Frequently a "talk it up" attitude is needed among the teachers or by the director of visual aids in faculty meetings. Some teachers are afraid to confess their inability to handle visual aids effectively and thus fail to seek help from the director. This results in the lack of a true understanding of the real values to be gained. These teachers remain silent and the few teachers who really know how to use the aids hesitate to declare themselves for fear of being thought superior.

If the teacher lacks proper education in the technics of handling visual aids, some means should be provided for acquiring that knowledge. This might be accomplished through cooperative visual aid courses or by learning from teachers who know how to use visual aids.

Too often insufficient time is allowed in certain courses for full expression by means of visual aids. When the teacher initiative and pupil initiative are subjected to course requirements and that alone, there is lack of interest on the part of teachers and pupils alike. The course then becomes unpopular. Some teachers are so busy making out lesson plans and daily reports that little thought can be given to visual aids.

Courses are often devoid of designed material, pictorial material or school journeys. Yet these aids, when given time and consideration, are stimulating to the pupils and to the teachers as well.

Teachers, then, all too often do not sense the advantages to be gained: (1) in using superior aids, (2) in predetermining the worthiness of the aid, (3) in acquainting themselves with the equipment available, (4) in giving proper time to the selection, preparation and delivery of the aid, (5) in cultivating simplicity rather than complexity and (6) in acknowledging weaknesses in handling visual aids by seeking competent help.

Films in the

SHERMAN P. LAWTON

A VISUAL education program in a liberal arts or in a junior college differs from that in a state university in that the private college does not have a responsibility to other schools and groups; a state-wide rental service is clearly the function of a university extension division. The college visual service is usually distinctly in-service, its function being similar to that of the school library.

The director of the visual aids program in a liberal arts college must know what aids are available for use. This in itself is no small task, but it is only one aspect of his work. He must familiarize himself with the outline and content of every course on the campus so that he can recommend visual materials to augment the work of instructors; he should be able to suggest particular films or slides and know when the charts, diagrams, models or other visual aids would best fit into the classroom schedules. If at all feasible, he should have the knowledge, time, equipment and, in an ideal situation, the personnel to make aids that are needed but are not available by rental or purchase. He must know educational methods and procedures, especially effective ways of using visual aids. He needs tact in encouraging proper methods without appearing to tell the instructors how to teach.

The combination of a visual-auditory program is rapidly growing in favor, so that advice on the use of radio programs or transcriptions in the classroom, coupled with the teaching of radio appreciation, is frequently part of the job. The function of a visual-auditory program is so broad in scope that it should be affiliated with the office of the dean.

Exclusive of salaries, an adequate film program on the college level can be operated on a budget of \$1 for each student. Unless the college is very small, this sum will pay for purchase and maintenance of projectors as well as for film rental. Two dollars for each student will in most cases permit the purchase of a few films, the making of slides and even the taking of a few pictures.

Budget allotment should not be made by departments or even by enrollment in the departments; rather, the budget should be a gen-

eral fund, to be used where it is most needed.

It usually pays to buy a few films that are more or less standard, that are used in a number of different courses and that need to be shown several times in each class for full benefit. Careful advance planning can bring most rental films to the campus on the days when they are needed at a cost of from \$1 to \$2 a reel. As long as sales prices of films remain from \$20 to \$30 a reel, it is less expensive to rent than to buy. Before the cost of a film library in a college is saved in rentals, many of the films are likely to be out of date.

Even the best films available are frequently designed for minds younger than those of college students. This is especially true in the

nonscience fields. It becomes important, therefore, for every college to have its own catalog of films that have been used, with full notes as to content and technical qualities. This catalog should be available to every member of the faculty. Eventually it will become an excellent guide, with a selected list of films especially suited to the particular school and the courses offered.

As new films become available and are announced in distributors' catalogs, teachers should be informed. A personal note to the teachers who should be interested is usually superior to an announcement in a general bulletin.

Previews of new films usually cost as much as regular rentals, but they are the most economical procedure in the long run. It is better to spend

There's Help at Hand

MARGARET R. GREER

SCHOOL superintendents and principals today are confronted with the problem of the administration of visual aids, especially since the 16 mm. motion picture film has found a place in the educational program. When finances or other difficulties prevent the establishment of a visual education department, there may be found an existing school department that may solve temporarily, or even permanently, this problem of organization and administration. This is the school library.

The school library can help the visual education program in many ways.

1. *By Making Available Information as to Sources of Materials.*—The school librarian can subscribe for, accumulate, publicize and circulate such helpful aids as the "Educational Film Catalog," "1000 and One, the Blue Book of Nontheatrical Films," *Educational Screen*, *The Nation's Schools*, Y.M.C.A. Motion Picture

Bureau Catalog, the numerous catalogs of commercial film companies, the catalogs of the nearest university visual education distributing center and many other lists and periodicals.

2. *By Centralizing the Borrowing, Renting, and Buying of Films.*—Whether films shall be purchased, rented or borrowed depends largely upon the particular film and its use in the classroom and upon whether the school funds are available for visual materials. No matter which system is used, there is economy of time and money in the centralization of the routine of acquisition within an individual school or within a city, county or regional school system.

The school librarian is equipped to act as a centralizing agent. Here is a person accustomed to serving all school departments without partiality; accustomed to ordering, budgeting, buying; accustomed to consulting teachers individually or in committees as to classroom needs,

College Program

Director, Radio and Visual Education
Stephens College

\$2 and the time of one teacher to see a bad film than it is to spend \$2 and the time of a whole class. If it is a good film, the instructors who plan to use it will know its content so they can tie it in more effectively with other course materials when it is brought back for class use.

A good editor and splicer will prove valuable, because frequently only parts of a longer film are pertinent to the subject being undertaken by a class. Distributors naturally do not like to have their films cut, so it is fair to edit only films owned by the college.

If the school can afford it, it is better to hire someone to operate the motion picture projectors than to depend upon the teachers; their job of focusing attention on film materials should not be handicapped by the job

of focusing a lens. Part-time student help is frequently a good solution.

The same film often has a valid place in several types of classes, so when a film is coming for one teacher, it is good policy to inform other teachers of the plans. Here again a personal note or conversation, rather than a bulletin, is best. For example, a film on sound waves, requested by the teacher of physics, might prove of value to classes in music, speech, psychology, general science, radio and even cinema appreciation. Sometimes arrangements can be made for a number of different classes to see the same film during a one or two day rental period, and eight or ten showings can be had for a rental cost of \$2 or \$4. Teachers who object because the film is not coming at the right

point in the course are often more interested in course outlines than in student instruction; a good teacher will capitalize upon opportunities as they arise.

Each faculty member who uses a film should be asked to rate it for the records. A valuable practice is to ask each film user to report on the means that were used to tie the film in with other course materials. A check list of some known ways of effective film usage should be provided. This practice has the double advantage of calling the attention of film users to various possibilities and also of providing the visual aids office with a record of the methods that were used. When some particularly effective technic is devised by an instructor, this method is added to the check list.

Attention should be focused on the idea that a visual aid is to heighten interest, clarify materials, facilitate learning and supplement the work of the instructor. The view that a visual education program is to make instruction more effective should discourage the idea that films should "give the answers." The most important function a visual aid can serve is to become a starting point.

A good film, for example, can easily become a core for discussion or the basis for related projects growing out of it. One school illustrated this point with a twenty minute cutting from the feature "Pasteur." This cutting contained almost no factual material and the facts presented could not be accepted as truth. Yet, in science courses a showing of this film led to an interested study of bacteria; in social problems courses, it led to discussions of social lag and socialized medicine; in English composition, it inspired papers on "The History of Antiseptics" and "The Life of Lister"; in cinema appreciation, it led to studies of directing technics and the acting of Muni.

The value of most visual aids lies less in the aid in itself than in the way in which it is used. The best service that a well-administered visual education program can make is not so much in handling the details of shipping and receiving—any clerk can do that—but in helping the teaching staff to understand the place of visual aids in the curriculum.

in the School Library

Librarian, Minneapolis Public Schools

and capable of arranging previews of films to be purchased, of assisting in selection of rental or free films and of helping prepare schedules for distribution to classrooms and auditorium. The library is one room in a school building that is open to all patrons without interference with classroom duties at all hours of the school day.

3. *By Establishing a Loan System for Films and Projectors.*—Whether films are purchased, rented or borrowed, someone must be responsible for their circulation. The most natural place for the circulation or loan of materials in a school is the school library. The same system used in charging books can be used in charging films, projectors and screens. Loan records are easily expanded to include visual aids, even to the extent of advance booking for individual classroom use of films particularly related to the work in hand.

4. *By Supervising the Care and*

Repair of Films and Projectors.—

The care of films involves rewinding and mending. To keep films in immediate circulation means a routine of inspection. Pupil help through volunteer service or through projection clubs can be stimulated under the direction of the librarian. Such pupils may assume the responsibility of rewinding, of making minor repairs and of checking the projectors. The same pupils may also be scheduled to run projectors during free periods and to assist in the loan and return of materials.

A librarian who knows when to send a book to the bindery rather than to attempt to mend it herself will know that major film repairs and servicing of projectors should not be attempted by the amateur and that systematic overhauling of equipment is an aid to service. If there is no one in the school system who can give this expert service, then such service must be sought commercially.

Sources of Films

DONALD DOANE

Research Assistant, Advanced School of Education
Teachers College, Columbia University

WITH the many thousands of educational films available to schools from hundreds of sources, there is to be found a wide variety on virtually any subject, topic or grade level with approaches that are suited to traditional and to progressive curriculums. Yet this multiplicity of films and sources, advantageous as it is, complicates the problem of selection. A better understanding of the characteristics of films from different classes of producers and distributors should help in locating more readily the films required.

At least the first two general film directories and the first two source directories named in the accompanying list should be in the hands of every user of educational films.

The distribution to schools is handled largely by the libraries of the university extension divisions, the college or university departments of education and state departments, also included in the listing. While most of the libraries of the latter two restrict their circulations within the state, it is generally true that the extension divisions will serve near-by states as well as their own. Accordingly, one may easily extend the number of films available and at the same time have alternate sources for many films by having at hand the catalogs of a number of such public agencies.

Perusal of the directories mentioned and of the catalogs of a number of near-by distributors, both public and commercial, will reveal a wide choice of films on practically any desired subject. How, then, can one choose between these? Obviously, the catalog descriptions of content will further narrow the choice.

Although some films may well be used for a wide variety of purposes in the school, the majority will be found, like books, to be adequate in some situations and poorly suited to

others. Let us consider particularly the adaptability of films of different types to the four following situations:

1. To teach curricular material directly.
2. To give an overview, introduction or summary.
3. To supplement or enrich the curriculum.
4. To use for assembly or similar purposes.

Films made by the larger producers who concentrate on the educational or classroom product will generally be made with specific reference to the first and second situations. In this category, perhaps the most commonly found and among the best are the films produced by the Erpi Picture Consultants, Inc.

(sound) and the Teaching Films Division, Eastman Kodak Company (silent), which are available through most distributors. Films made by these and some other producers in this category usually are accompanied by teachers' manuals and may often be so recognized, although not all distributors supply manuals.

These films are rarely more than one reel in length and usually are made under the guidance of educators with specific reference to commonly accepted course content. They tend to be largely factual and informational. Their suitability for a specific situation, whether a detailed explanation or a broader overview is desired, can as a rule be determined from the catalog description.

Films made by industrial concerns, the government or public service organizations usually can be identified through the fact that distribution is free or the borrower pays handling costs only. The sponsoring concern or organization is generally indicated in the listing. These may be dis-

(Continued on page 92)

Making the Most of Visual Aids

CHARLES M. EVANS

Superintendent, Gila Bend, Ariz.

THE use of visual aids is somewhat restricted in the small school system, since new forms of instruction, particularly those necessitating the purchase of additional equipment, do not earn a place in the budget.

Like most small systems, Gila Bend, Ariz., is entirely without the help of museums to assist in the use of visual aids. In this school system with an enrollment of 185 most of the established visual aids, with the exception of still picture projectors, are available. The term "visual aid" is used in its broadest sense, *i.e.* (1) objects, specimens and models; (2) unprojected still pictures and graphic representations, such as maps, charts, graphs, globes, blackboards, posters, cartoons, photographs, prints and loan exhibits from large manufacturers; (3) silent and sound motion picture projectors, using 35 mm. films.

The superintendent should organize and plan his visual education program so that the teacher can use it to best advantage. In the effective administration of these aids one person must be held responsible for their classification, cataloging, storing and ready accessibility to the entire faculty. The logical person for this duty is the superintendent or, if the school system is larger, the principals of the different schools.

The first step in administering a program should be the collection of all visual materials in a room near the auditorium.

A handbook should then be prepared covering all available materials.

As the program advances, a record of the previewing of films shown and a collection of content summaries of edited films and films on which teachers' manuals have been prepared should be filed.

Educators, Here's One Answer

VERNER STODDARD

Superintendent, Spencer, Idaho

MANY educators in large schools wonder what the smaller schools are doing to maintain a satisfactory program of curricular offerings. An analysis of the curriculum at Spencer, Idaho, will supply one answer to the question.

Spencer may rightly be said to have a small school. The enrollment this year is 20. For the last seven years the enrollment has ranged from 18 to 23 so that this figure is a fair average.

There are three full-time high school teachers, which is the minimum number the state of Idaho will recognize for a four year accredited high school.

The high school serves three small communities: Spencer; Humphrey, ten miles to the north, and Kilgore, 18 miles to the east.

First in any educational program is the selection of teachers. Since there are only three teachers at Spencer, an attempt is made to have a major in English, one in the natural sciences (with a minor in mathematics) and one in the social sciences. That arrangement gives each teacher two or more subjects in his or her major. The accepted policy is to employ two men teachers and one woman teacher.

The following subjects are offered at Spencer: English 1, 2, 3 and 4; two mathematics courses, algebra and geometry; six courses in the social sciences, American history, world history, economics, occupations, physical geography and current events; in the natural sciences, physics, biology, geology, genetics and ornithology; in business, typewriting 1 and 2, general business, business law and salesmanship; in music, music appreciation and history of music.

The schedules of curricular offerings for a two year period will explain the Spencer progress. In 1938-39, the following courses were offered: English 1, 2 and 3; algebra and geometry; American history; economics (first semester), followed

If you've been wondering how small high schools in sparsely settled regions arrange a satisfactory curricular program with small staffs and budgets, this is how it is done in Idaho

by salesmanship; occupations (first semester), followed by physical geography; current events; physics; general business (first semester), followed by business law, and ornithology.

For 1939-40, the following courses will be offered: English, 1, 2 and 3; algebra and geometry; world history; biology; geology (first semester), followed by genetics; typewriting 1 and 2; current events, and music appreciation and history of music.

English 1 and 2, algebra and geometry are given every year. Other courses are given every other year and the classes are combined. American history is given one year and is taken by the juniors and seniors. The next year world history is given and is studied by the freshmen and sophomores.

One year of English literature is given biennially. The next year American literature is taught the first semester, and world literature, the second semester. In this way most of the classes range from seven to ten pupils. In English 1 and 2 and algebra and geometry, classes vary from three to five.

The individual method of instruction is used in presenting the subject. Work books are used in some subjects and in other subjects, questions are prepared on each assignment and handed to the pupils. The assignment is then worked out by the pupil and reported on individually.

Suggestions are offered and each pupil's problems and difficulties are discussed with him individually.

Four days a week the pupils report on individual assignments. One day each week is used either for round table discussion on assigned topics or for examinations. Thus, there is an opportunity to discuss, as a group each week, those problems that are common to the class.

Each pupil may progress as fast as his desire and ability will permit. A minimum amount of work is set up in each subject for each semester. This is subdivided into three parts (representing the amount of work required for each six week period). Each six week period is divided by six to show the pupil how many assignments he must complete each week.

When the faster pupils have completed the minimum requirements, additional correlated material is given to complete the semester. Thus, each pupil can take his own stride; he has a definite amount of work mapped out for each semester; there is no way that he can cheat or depend upon his classmates for grades; his problems are met and mastered as they are reached; he must do his work each day or each week; he does not chance all on one fling at an examination; he is not forced to listen to the humdrum recitations of fellow pupils and the reiteration of his teachers. He comes to school to study quietly and to report when he is ready, not when the clock says he should be ready. This system has been used at Spencer for three years and is becoming habitual now.

The grading system ties in with the method of teaching. Each question is valued in points. At the end of the first six week period the total number of points for each pupil is determined. The point grade is listed in order. The pupil with the highest grade gets an A. The other grades are given according to where the total points earned by the pupil place

him in relation to the highest number. Therefore, the grading system is a competitive system within the group.

For the last three years a 16 mm. sound-on-film projector has been used. Formerly the school officials sent to Chicago, San Francisco and Portland for films, but now a film library is being established at Pocatello to serve southern Idaho. The school also has electric recording and a public address system with the unit. The electric recording is used for music appreciation classes and for matinee dances. Short dances also are held after basketball games.

The public address system gives the pupils experience in talking

through a microphone. It is used for special radio programs and for classroom work in current events. A film strip machine supplements the sound projector.

The physical education program is perhaps more complete than at most of the larger schools.

The boys have touch football during the fall; basketball during the winter, and baseball, boxing and track in the spring. Those are the organized sports and every boy participates unless his physical condition exempts him.

The boys also have available the following games that are played before school and during the noon hour: ping-pong, tennis, darts, Chi-

nese checkers, checkers and badminton. After school and on week ends, skiing can be enjoyed.

The girls do not enter competitive sports but have a complete athletic program. Once a week they work on their health work books. The other four days they play basketball, volley ball, deck tennis, hand and racket badminton, ping-pong, darts, shuffle board and tennis. During the winter there are at least three play days for the girls (one at Spencer, one at Lima and one at Dubois).

Spencer has an interesting association with Kilgore, a community 18 miles distant. It is called the "mother school plan" and, as far as I know, Clark County, Idaho, is the only place in which this plan is in use.

It is an agreement between the boards of education of the towns of Spencer and Kilgore. It is more or less a gentleman's agreement. It may be broken by either party at any time.

Spencer is the mother school. It is an accredited four year high school. Kilgore operates a two year high school under the supervision of Spencer. The first two years are correlated with the first two years at Spencer. The pupils go to Kilgore the first two years and then come to Spencer for the last two years of high school work.

A copy of the Kilgore schedule will show the close correlation of curriculums between the mother school and the affiliate: algebra, geometry, English 1 and 2, occupations, general business and current events.

When the state high school inspector visits Spencer he checks carefully to make certain that the standards of the two schools, for the first two years, are approximately the same. If everything is satisfactory he approves the plan but if the standards of the affiliate are not at par, he warns the principal of the mother school.

This plan has been in operation for four years. It has been satisfactory to Spencer and Kilgore alike. It gives the Kilgore pupils an opportunity to stay at home two years longer than otherwise would be possible. Their credits are recognized and the work they do is on a par with that of the mother school.

Capturing Adolescent Interests

LELAND B. JACOBS

Michigan State Normal College

"SHALL we teach traditional literature in the junior high school English classes?" This is a question that English teaching circles frequently debate. Often when this debate arises two extremes line up uncompromisingly. There are those who would continue the dissection of "Julius Caesar" and "Silas Marner" in the belief that standards of taste in literature must be raised and that it is by the analysis of a few classics that heightened cultural standards can be attained. On the other hand, the opposition maintains that there is nothing in traditional literature that whets the interests of modern youth and, in consequence, a study of the classics is just so much wasted time and energy. They recommend a wide acquaintance with current literature of less than classic stride.

Neither stand seems justifiable if one begins with the children themselves. They exhibit no concern for the English teacher's debate. They do not care whether their reading falls into the category of classic, neo-classic or popular. Junior high school pupils are adolescents, beset with the problems of adolescence, interested in reading whatever will help the adolescent mind in its quest of solutions

for its problems. The chief demand of the junior high school reader is that the literature be attuned to his present stage of physical, mental and emotional development.

Well-chosen literature for adolescents will make strong appeals to known adolescent interests: physical vigor, personal fortitude, success, constancy to an ideal, honest sentiment.

Neither popular nor traditional literature has a monopoly on such appeals. Because this is true, neither extreme seems the common sense program to follow. One needs to forget the categories and consider the child.

When this is done, there need be no controversy concerning what type of literature shall be presented in the junior high school. Greater consideration needs, rather, to center in the suitability of each selection, whether traditional or popular, to adolescent taste and interest. Whenever this test is applied, it is my experience that the alert teacher of English who understands junior high school pupils and their problems can select from both the writings of the past and present more worth-while reading experiences than any teacher will be able to present in three years in the junior high school.

When Teaching Handicapped Children



Even in a hospital school the handicapped child participates in group situations. Braces and splints do not handicap members of this rhythm band.

FREDERICK L. PATRY, M.D.

Psychiatrist, Anderson School, Staatsburg-on-Hudson, N. Y.

THE teaching of the physically handicapped child is in essence of philosophy the same as the teaching of all children. It may be summarized: the development of each child to the optimum of his constructive potentialities.

Only 10 per cent of all handicapped children are at present being given opportunities of special education and some 90 per cent of the burden now falls upon the grade teacher. Our society is obviously not measuring up to its obligation.

The importance of early discovery and teaching of the handicapped child has not been sufficiently recognized. Our social engineers and economists would be the first to tell us that the neglected education of the physically handicapped child makes a far more costly drain upon society in later years through unemployment and dependency, with its

blighting effects of indiscriminate relief, delinquency, crime, mental disorder and unhappiness.

Self-reliance, self-direction, self-control and self-respect, fostered by effective socialization and capacity for marketing himself, are cardinal goals in educating the physically handicapped. This is a challenge to the teacher and administrator to enlarge their vision of the potentialities of each child by visualizing his life as a whole. Each child must be objectively taught to accept his limitations and the inevitable slighting, rebuffs, criticisms and failures.

Perhaps more fundamental than treating the maladjusted physically handicapped child is the prevention of these conditions. A proper appreciation of the significance of the problem, together with a wholesome affection for all children, will be the touchstones toward an organized

preventive program. Every child needs emotional, social and economic security, which can be attained only by early diagnosis of his personality and performance and a tailor-cutting of the educational pattern to meet his changing needs.

The demands upon the child must not be heavier than his resourcefulness and his capacity for reasonable achievement. Since every child primarily wants to succeed and to win approval, it is important that the load not be greater than he is able to bear. We must ask ourselves how much tension the child can bear with success. As we shape our demands to his level and kind of ability at the period of development in which we find him, the child will respond with adequate effort as his interests are significantly aroused. Excessive strain leads to fatigue, discouragement, personality twists, social maladjustments and soured life attitudes and these bring about unwholesome deviations and antisocial patterns.

Primarily schools should be diagnostic centers that ascertain as early as possible individual differences with respect to various abilities, behavior and personality traits and also special tastes and interests. This will lead to a type of educational shoe that will fit without pinching. An emotionally and educationally cramped child cannot become a social asset. Moreover, the child's emotional reactions must be adjusted to the teaching situations if he is to capitalize upon his intellectual assets. Especially on the borderline of intelligence, varying degrees of emotional conflict mask intellectual possibilities.

Teachers should always keep in mind that they are assisting the handicapped child to become an effectively socialized individual. It is necessary that they do not do for the child what he can do for himself.

Ridicule, teasing, unwholesome comparisons, competition by those with whom success is impossible must be avoided. In view of a number of unknown factors that mask potentialities, dogmatism in diagnosis, prognosis and treatment should be avoided. Like the good physician,

Everyone has known physically handicapped children who have been educationally, socially, emotionally and economically adjusted in spite of marked disfigurement or disability. Physical handicaps, such as coarse features, homeliness, oversize and undersize, may be forgotten if in-

fluenced by infective, toxic, metabolic or endocrine upsets, that may affect personality adjustment.

Pitfalls to be avoided in the teaching of the physically handicapped are legion. Perhaps a primary sin is that of oversolicitation, overprotection and overaffection. There is a tendency to do too much, especially for the child who is obviously crippled. If we do for him beyond the time he is able to do for himself, we perform a disservice with respect to his growing-up process. Unconsciously, many parents do their level best to keep the child from growing up by keeping him too dependent, impressing the child with his inferiority and the adult's superiority or making all his decisions for him. In certain children this may give rise to recessive traits such as timidity; in more extroverted personalities, to rebellious attitudes toward authority.

It is so easy to spoil a handicapped child by granting his every want and by encouraging his whims. If we fail to train ourselves in the interpretation of behavior, the child may utilize his handicap to escape unpleasant demands, opportunities and situations. Again his growing-up process becomes stultified through lack of development in responsibility and in facing wholesome tension.

Of particular moment is the period of transition from bed to ambulatory life, from hospital to home, from home to school life. For the first time after a period of passive social integration, he is called upon to participate actively in group situations. He is likely to be retarded in playground skills and to appear awkward or timid, which may make for ridicule and the calling of names. If the teacher cautions against "rough boys" or unduly restricts the child's play, he may withdraw from normal social participation and find satisfaction in a world of fancy.

A sympathetic understanding and cooperation of other children may be developed by the teacher whose personality and education are attuned to the nature and needs of the handicapped child. She will gain the good will of other children if she nips in the bud tendencies of overattention toward the handicapped child. On no account must she do for him what the child can do for himself.



Going to school in the hospital eases the transition to home and school life for the handicapped child and prepares him for social integration.

the educator must seek causal factors making for the development of strengths.

Besides a wholesome acceptance of himself as an individual, with limitations as well as strengths, the physically handicapped child should be accepted by those who surround him at home, on the playground and in school as a social asset who can contribute in his "poor best" way to social welfare. They must ignore his shortcomings and magnify the things he can do.

The habit of success in winning social recognition and approval should be the prevailing experience of the child. In view of the greater difficulty of vocational placement of such children, the school or state must take an important part in paving the way for economic security of each child.

Factors that determine the seriousness of the physical handicap are manifold but perhaps the most important one is the emotional attitude of the child with respect to the possible social evaluation of his defect.

Individual sensitivities are sufficiently appreciated.

In view of the fact that adult feelings of inferiority by virtue of physical handicaps are primarily on the basis of residual child defense mechanisms, the first concern should be the wholesome ingrainings of proper emotional attitudes concerning the physically handicapped. Gratuitous remarks of a derogatory nature must be spared the suggestible child.

The extent of inability of the child to participate normally in activities is also a serious factor in adjustment. But even in a hospital school or an institution or where home teaching obtains, an understanding environment may be shaped that will make for social solidarity.

The age of onset and discovery of the handicap, as well as the duration of its effects, are obviously factors that modify the child's capacity for educational and social growth.

In addition to psychogenic conflicts, which drain personality balancing, there are various somatic drains and dysfunctions, whether deter-

Single Salary Schedule

WILLARD S. ELSBREE and EARL F. SYKES

Professor of Education, Columbia University, and
Instructor, Pennsylvania State College

WITH the increasing number of adoptions of single salary schedules for teachers in recent years, a number of questions have been raised by school administrators and by boards of education about the relative advantages of this type of schedule over the traditional position type of scales that were formerly so popular. Some school officials have opposed the single salary schedule plan on the grounds that the cost inherent in such a plan makes it impractical to operate and that many of the advantages claimed for this type of scale have not been realized in cities in which it has been tried.

Study Reveals Practical Features

The purpose of the study¹ summarized in the following paragraphs was to analyze the evidence pertaining to the foregoing criticisms and to obtain the opinions of administrators in representative cities having single salary scales as to the weak and desirable features of this type of schedule that were revealed in actual practice. The cities that cooperated in the investigation² were well distributed geographically throughout the United States and the data obtained showed the functioning of this type of schedule under varying conditions.

More than half of the cities that reported the date of adoption began following the plan more than ten years ago, one having adopted it in 1920. The term "single salary schedule" was used to refer to any schedule that provided for the payment

of teachers according to their qualifications as measured by years of experience and training, regardless of the positions that the teachers held in the various divisions of the school system.

School officials in all the cities favored the plan after using it, although several reported defects in their particular schedules. One superintendent felt that the principle involved in such a schedule was unfair to married men and, therefore, unwise if the principle were interpreted as excluding salary differentials for such individuals. Another superintendent commented: "Ideally the single salary schedule is fair and equitable but, after trying it for fifteen years without adequate funds, I have decided it is a most difficult thing to administer justly and honestly." Whether the official concerned would have found it easier to administer some other type of schedule with such limited funds might be questioned. In general, the school officials stated that the single salary schedule had proved a great help in improving teaching conditions.

Two Cities Abandon Plan

Only two of the cities reported that they had abandoned their single salary schedules. In both cases the effects of the depression were given as the major cause for such action. The superintendent in one of the two cities stated that the school system planned to return to the schedule as soon as it was financially feasible. The other city revised and re-adopted its schedule in 1936.

Four of the cities, in addition to the one mentioned above, had modified their schedules. In three of the five cases the modification involved reducing the size of the yearly increments and was made necessary because of curtailed school funds. Three communities, including one of

the foregoing three, included provisions granting differentials to men and married teachers. The other community removed the provision guaranteeing automatic annual increments and replaced it with the requirement that increments be granted only upon recommendation of the principal and supervisor. In one case the revision also included a plan for allowing increment credit for travel, curriculum building, research and experimentation projects and educational contributions.

Principles Not Criticized

Several other school officials stated that their schedules needed revising, one because it was too automatic and mechanical, and one because it forced married men to live less comfortably than single women. In one city committees representing the board of education and the teachers, after several months of critical examination of their schedule, had recommended a reduction in the size and an increase in the number of increments. It is especially significant that in no case were the fundamental principles of the single salary schedule criticized, only the operational details.

Twelve, or 60 per cent, of the cities reporting on the actual cost under the single salary plan as compared to estimates, stated that original estimates of the future costs of the single salary schedule had proved accurate and that the plan was not involving greater cost than was anticipated at the time of adoption. Five communities reported that the costs had exceeded the estimates. Superintendents in two of the five accounted for the excess cost by the fact that the schedule had stimulated more teachers to obtain additional training than had been expected. Two cities reported that the differences between the estimated and the

¹Elsbree, Willard S. and Sykes, Earl F.: "A Study of the Policies and Practices Used by 22 Single Salary Schedule Cities of 30,000 to 60,000 Population," Teachers College, Columbia University, 1938.

²Cities that cooperated in the study were: Fort Smith, Ark.; Santa Barbara, Calif.; Colorado Springs, Colo.; Stamford, Conn.; Decatur, Ill.; Quincy, Ill.; Rock Island, Ill.; Richmond, Ind.; Cedar Rapids, Iowa; Lexington, Ky.; Battle Creek, Mich.; Dearborn, Mich.; Port Huron, Mich.; Jackson, Miss.; Watertown, N. Y.; Asheville, N. C.; Cleveland Heights, Ohio; Norwood, Ohio; Muskogee, Okla.; Green Bay, Wis.; Madison, Wis., and Superior, Wis.

actual costs occurred because there had been fewer resignations than expected, thus preventing the employment of as many new teachers at the lower end of the salary schedule as was anticipated.

The superintendent in the fifth city stated that the increments had been too high. Five, or 25 per cent, of the cities reported that the number of transfers from lower to higher training schedules had been larger than was anticipated, thus bearing out the points made above. Although the schedules involved unexpected costs because fewer teachers resigned and more took advanced training, the added expense was undoubtedly justified by the improved tenure and better-trained teaching personnel.

Sixteen, or 89 per cent, of the city superintendents reporting on means used to control salary budgets, stated that they definitely planned to keep their salary budget under control by replacing teacher withdrawals with new teachers appointed at the lower end of the salary schedule. Although such a plan would be effective as a means of budgetary control, provided tenure regulations did not make the number of replacements too small, nevertheless, it would have anything but a beneficial effect insofar as the quality of the teaching personnel was concerned, assuming that the amount of professional preparation and years of experience are criteria of the quality of such personnel.

Control of Salary Budgets

Two of the cities controlled their salary budgets by limiting the number of training credits that a teacher could apply toward promotion during any one year. One city kept teachers in each class of the schedule for five years. Another used automatic retirement at the age of 68 as an aid in reducing costs. In two communities the teaching load (number of pupils per teacher) was varied so as to keep the salary budget under control. All but two reported that the means used had proved satisfactory.

The superintendent in one of these cities stated that the means of control used—replacing teacher withdrawals by appointments at the lower end of the salary schedule—had not proved satisfactory because the teacher turn-

over was not great enough. This defect is more or less inherent in a good salary schedule since one of its major purposes is to reduce teacher turnover. The superintendent in the other city said that, although the new teachers had less experience, they had more training than those leaving; consequently, there was little difference in the actual salaries paid.

Holding Costs Within Bounds

Fourteen, or 70 per cent, of the school systems reporting had discretionary provisions in their schedules that permitted flexibility in the size of increment a teacher might receive in any one year. In 10 of the cities, such provisions took the form of permitting the withholding of any or all increments during any one year, and in six cities special increments were permitted. One of the 14 cities included the following provision in its salary schedule as a means of holding costs within bounds:

"In the event that the board shall for any reason have insufficient money to pay the salaries provided, all increases shall be granted and a horizontal cut in all teachers' salaries shall be made sufficient to bring the outlay for salaries within the budget available."

In a majority of the cities that had adopted a single salary schedule before the depression, the average teacher's salary in 1936-37 was less than at the time the schedule was adopted. One city reduced its per pupil cost of teachers' salaries by almost 50 per cent in the sixteen year period during which the single salary schedule had been in effect. Such evidence indicates that salary costs under this plan did not increase by any such exorbitant amounts as are often predicted by critics of the plan. The fact that all the cities on this type of schedule in 1931-32 were able to reduce their average salary again demonstrated that flexibility in salary costs is possible under the single salary plan.

One means, used by all the cities which were operating on a single salary basis prior to the depression, for reducing school costs during the depression was an increase in teacher-pupil ratios. The authors do not wish the foregoing statements to

be interpreted as a blanket sanctioning of increases in teaching loads and of cuts in average salaries but rather as indications that cuts in school costs can be achieved under the single salary plan when such action becomes necessary.

In the cities studied the minimum salaries varied widely but the maximum salaries showed still greater differences. Some differences were to be expected because of variations in costs of living. However, the differences in a number of cases were entirely too great to be accounted for in this manner. The lowest maximum salary for white teachers was less than a third as much as the highest maximum. The lowest maximum for colored teachers was less than one-seventh as much as the highest maximum for white teachers. Such great differences in salary levels are certain to be reflected in the caliber of the teaching personnel. However, they indicate that the single salary principle, as such, can operate effectively when salaries are low.

Salary Schedules May Vary

There was a wide variation among the cities in the percentages of teachers who were receiving the maximum salary for their respective training groups. These percentages were not correlated with the level of salaries paid but rather with the number of years the schedule had been in force. It also became evident that a great deal depends upon the nature of the schedule itself, since the schedule that provides few steps for each training level will soon have a large percentage of its teachers at maximum.

In general, the cities that provided the best salaries had better trained teachers. For example, in one city paying high salaries more than 65 per cent of the senior high school teachers had five or more years of professional training while less than 12 per cent in one of the cities paying low salaries had an equivalent amount of training. However, there were several striking exceptions to the foregoing generalization, indicating that the nature of the schedule and the salaries paid in surrounding communities, as well as the size of the salaries paid locally, constitute

important factors in determining the amount of professional preparation the teachers had.

A fourth of the communities allowed salary differentials for men but only one city had a separate schedule for men and women. The amount of differential allowed for this purpose varied from \$200 to \$700 per year. Several of the cities provided salary differentials for teachers of special subjects and special groups, including athletic coaches and directors of school bands.

Although only one city reported using a merit plan of rewarding teachers and of determining salary increments, four others used a combination of automatic increments with possible variations made on a merit basis. In one of these the superintendent, whenever he deemed such a procedure justifiable, might with the approval of the board withhold either the experience or the training increment. The schedule in this school system also permitted the superintendent to move a teacher one or more steps on the experience schedule when there was evidence of superior teaching ability, provided that no teacher was advanced more than one step at a time or more than two steps during any five year period. One superintendent strongly favored a merit plan, reporting that his community planned to adopt such a plan soon.

Approximately half of the school systems allowed full credit to teachers for years of experience in other school systems. However, several limited the number of years for which credit would be allowed. A number of the other communities allowed half credit for such experience. Two specifically stated that they allowed no credit for this type of experience while an equal number left the place of the new teacher on the salary schedule to be determined by the superintendent. In one of these, the new teacher's initial salary was frankly fitted "to each appointee's record and probable value."

All of the communities required a minimum of either four or five years of professional preparation beyond high school graduation for new high school teachers, while 55 per cent required at least four years of training for new elementary teachers.

A majority of the schools either had a definite local policy with respect to the retirement of teachers or else the matter came under the jurisdiction of state retirement legislation. The superintendent in one of these cities stated that retirement constituted a vital problem in connection with the operation of its salary schedule because of the reluctance of teachers to accept pension at a reasonable age. As a result, the highest salaries were being paid to superannuated teachers. Out of the six cities reporting that they had no definite policy with respect to retirement, four stated that retirement did not constitute a problem in the operation of their schedules. However, one foresaw possible complications in the future.

Half of the communities had definite policies regarding the amount of credit that a teacher might apply in any one year toward advancement

on the salary schedule. A fourth of the school authorities required that teachers get their courses approved; otherwise, salary recognition would not be granted. An equal number limited the number of courses in which a teacher might enroll during any school year, while one other contemplated including such a restriction in its schedule.

Only a few of the cities reported allowing increment credit for travel, professional contributions, curriculum revision work, books and articles. One of these had a special committee that attempted to evaluate summer travel and professional contributions in terms equivalent to university credits. Two others, while permitting no salary credit for such activities, required all teachers to earn six semester hours of university credit or its equivalent in travel and similar activities every five years in order to retain their positions.

Oral Reports Require Vitality

GEORGE McANULTY

Supervising Principal, Moon Run, Pa.

THE oral report is the best friend and the worst enemy of good teaching. Carefully used, it adds variety and interest to the class, but all too frequently it becomes a haphazard, monotonous series of lifeless, meaningless words.

Monotony is one of the most serious deterrents to the oral report. An entire period spent in this way is largely wasted, for after the first few minutes the pupils lose their alertness and their powers of concentration are thereby weakened. Two or three reports given during each period on some topic relating to the day's work have far more value.

Preparation is the fundamental essential of a good oral report. A hurriedly read selection, prepared while the preceding report is being delivered, is of no more value to the class than to the individual. On the other hand, a pupil who has made a thorough study of his topic will himself be interested in it and will transfer his interest to his audience. If he is required to do some original work in

addition to his summary—as, for instance, demonstrating the relationship between it and a large topic studied—his own and the class's conception will become broader and deeper.

If the interest of the class is to be kept fresh, needless repetition must be avoided. This can be accomplished only by careful selection of the articles and topics assigned. Material that is readily available in a commonly read newspaper or in the library may be assigned to the advanced grades; however, in most cases it is preferable to select the material for the pupils from the teacher's files, even with older pupils, unless they have been given special training in the use of references.

Keep oral reports vital and alive by assigning definite and pertinent topics. Keep them worth-while by insisting that they be linked to the general subject of discussion. Above all, keep them interesting to the classes and to yourself.

Too Many High

ONE-HALF of the so-called high school principals in the United States are not needed. This statement is made with confidence that it is not an exaggeration.

The median sized high school in the United States has less than 100 pupils enrolled. As an illustration, the Missouri High School Directory for 1936 listed 848 high schools, and of this number 526 enrolled less than 100 pupils each. If it is true that half of the high schools in the United States have less than 100 pupils, probably it is also true that one-half of the high schools in the United States are not needed. Of course, this does not mean that youth of high school age should be denied opportunity for high school education. On the contrary, it means that boys and girls should be given the opportunities and advantages of better high school education.

For many years school administrators have realized the lack of educational advantages provided in the small high school. In such educational units there can be little more than one curriculum for all pupils. Byron Lee Westfall in a recent study, "Educational Opportunities in Missouri High Schools," concluded that "in comparison with larger schools the high schools of 100 or fewer pupils are severely handicapped with respect to their environmental resources, their physical plants, their administrative, supervisory and instructional staffs, their curricular and extracurricular offerings, including programs for health and guidance."

Statistics Justify Statement

In a special release of the National Survey of Secondary Education, made by the U. S. Office of Education in 1935, the statement was made that "the typical small American high school with less than 150 pupils enrolled suffers from inadequate facilities. . . . According to the announcement, there are approximately 12,000 secondary schools in the United States that enroll 100 pupils or fewer." Then, if considered on the basis of enrollment only, it would seem that there is justification for the

statement that one-half of the high school principals are not needed.

The next point of consideration is the work of the high school principal in the small school. What does he do?

The median teaching schedule of principals in rural and semirural high schools is usually four periods a day. A majority of the principals also supervise a study hall for two periods per day.

In Bulletin 1932, No. 17, Monograph No. 1, of the National Survey of Secondary Education, the conclusion is reached that "in small school systems that operate the entire school

organization in one building or that have one or two small elementary schools in addition to the high school, the superintendent of schools is virtually the high school principal."

In the proceedings of the Missouri Association of Secondary School Principals, which were published in a bulletin of the state department of education in 1936, Dr. John Rufi, professor of secondary education, University of Missouri, reports a study of the division of administrative responsibilities in the public high schools of Missouri. His conclusions are that "the smaller the high school enrollment, the smaller the number

Responsibilities and Duties of High School Administration

General Administration:

1. Selection of teachers
2. Assignment of staff
3. Dismissal of teachers
4. Selection and assignment of substitutes
5. Administration of attendance
6. Clerical work attached to attendance
7. Responsibility for scholastic records
8. Clerical work attached to scholastic records
9. Classification and promotion of pupils
10. Administration of marking system
11. Responsibility for curriculum revision and construction
12. Preparation of program of studies
13. Preparation of schedule of classes
14. Direction of pupil enrollment
15. Administration of discipline
16. Purchase of instructional supplies
17. Purchase of janitorial supplies
18. Purchase of equipment
19. Inventory of supplies and equipment
20. Preparation of the general high school budget
21. Administration of the general high school budget
22. Preparation of the high school pay roll

23. Administration of building and grounds
24. Supervision of janitorial service

Extracurricular Activities:

1. Direction of pupil participation in government
2. Direction of interscholastic activities
3. Direction of assemblies
4. Direction of clubs and intramurals
5. Direction of homeroom programs
6. Direction of activity finances
7. Clerical work attached to activity finances

Guidance:

1. Direction of guidance program
2. Guidance counseling
3. Administration of guidance records
4. Vocational guidance

Public Relations:

1. Responsibility for interpreting school to public.
2. Direction of news articles
3. Responsibility for public programs and exhibits
4. Direction of commencement activities
5. Coordination of P.-T. A. activities

School Principals

C. W. MARTIN

State Teachers College
Kirksville, Mo.

of administrative duties assumed by the principal. . . . The returns from high schools enrolling 99 or fewer pupils indicated that the title of principal is a misnomer in most schools. In a large majority of the schools of this size that were studied it is evident that the superintendent, rather than the principal, actually directs the institution and that the principal exerts little or no administrative leadership."

The unescapable conclusion is that the so-called principals in high schools with enrollment of 100 or less are merely teachers with the title of principal.

In most cases, this teacher who is called principal receives more salary than other teachers. I have just completed a study which shows that the average annual salary of principals in these small schools is about \$70 more than the average salary of teachers in the same schools. The range in the differences in salaries for principals and teachers in these 100 schools is from no difference at all to \$330; or, in terms of percentage, this range is from zero to 40 per cent.

A difference of \$70 seems to be a small amount but when the average salary of teachers in such high schools in the state is known to be between \$800 and \$810 per year, it can readily be seen that principals receive almost 9 per cent more money than do the teachers.

In the same study a check was made to see what percentage of these little schools have principals, so designated in the directory, and what percentage do not have principals. An investigation of the first 100 high schools with enrollments of less than 100 listed in the Missouri High School Directory for 1937-38 shows that 90 per cent of these schools designate one member of the high school staff as principal, while 10 per cent do not designate a principal.

Further investigation was made to see what the so-called principals in such schools in Missouri were teach-

This charge is made by a professor of education who produces facts and figures to substantiate his premise and who presents a practical solution as well

ing that year. Of the first 100 such principals listed in the directory, two taught in five subject matter fields, 11 taught in four fields, 28 taught in three fields, 55 taught in two fields, and only four taught in one subject matter field.

It might well be said that this investigation showed that one-third of these principals taught in three or more subject matter fields while it is the recommendation of the state department of education in Missouri that no teacher attempt to teach in more than two fields. It would seem that these principals not only are teachers but are the only teachers who attempt to teach whatever is left after the other two or three teachers in the high school have been assigned their schedules.

What should be the duties and responsibilities of the high school principal who deserves the title? In his study, Doctor Rufi, after a thorough examination of the writings and studies of many authorities in the field of secondary education, listed 40 duties, tasks or responsibilities that are commonly involved in the administration of a secondary school. The forty were divided into four main groups. This list of responsibilities and duties involved in the administration of a high school, as given in this study, is reproduced in the accompanying table.

In the 50 public high schools analyzed, each with an enrollment of less than 100 pupils, not one of the 40 responsibilities or duties was han-

dled entirely by the principal in even half of the schools. The one duty reported by the 48 per cent of the principals was clerical work attached to attendance. Twenty-eight per cent were responsible for the administration of attendance; 24 per cent, for clerical work attached to scholastic records, and only 18 per cent, for scholastic records. Twenty-six of the 40 duties were administered chiefly or entirely by the superintendent in more than 50 per cent of the schools.

In actual practice the principals in the small high schools are not principals. The superintendent is both superintendent and principal. This may, and sometimes does, cause friction between the superintendent and the so-called principal.

Overlapping Causes Friction

As it often happens, there is not administrative and supervisory work enough for both, the duties are not clearly understood by each and the high school is administered in a double-barreled fashion which is a breeding ground for trouble and inefficiency.

What is the solution for this problem? My constructive suggestions are:

1. Have no principals in the small high schools, certainly not in schools of 100 or fewer pupils. In most cases, schools with from 125 to 150 or even 200 pupils have no need for two administrative officers.

2. Turn the administrative and supervisory work of the entire school system over to the superintendent of schools and give him clerical assistance to do the numerous routine, mechanical duties, so that he can be more than an office boy or a clerk. The superintendent is paid to do the job of a highly trained specialist in education, but many times he has no opportunity to earn his money because he is kept covered up with work of a variety that could be done just as well or better by a well-trained clerk.

Sixth Grade Newspaper Project

WILBUR GROFF

Elementary English Teacher
Fairview Avenue School, Dayton, Ohio

IT IS not until after the successful completion of a project that a teacher fully realizes and appreciates the worth of it as an instrument for the development of English skills. The written word, however, is but one unit in the complete construction of any newspaper, as is clearly demonstrated in this sixth grade English project at Fairview Avenue School, Dayton, Ohio.

Approach

The current events periods in social science had challenged the pupils to read newspaper articles. A few well-written articles were read in the English class to note the human interest factor in the stories.

Enlarged Interests Through Reading of News Stories

1. Awakened interest in news
2. Awakened desire to read different sections of paper
Many admitted that up to that time their only interest had been the comic sheet.
3. Contributions of newspapers from other cities and countries
The purpose was to note the construction of a newspaper as well as to compare and check the difference in newspapers.
4. Papers studied:
Four local newspapers
Five out-of-town newspapers: *Chicago Tribune*, *Chicago Herald & Examiner*, *Cincinnati Enquirer*, *New York Times* and *Greenville Advocate*

Points Observed in Newspapers

1. Front page balance
2. Headlines
3. Subheads
4. Streamers
5. Front page news
6. Printing type
7. Inside page news
8. Location in the paper of news stories and of sections
9. Varieties of news
10. Advertising, attractiveness and probable cash value
11. Classified ads and price rates
12. Sections: front page, editorial, radio and theater, society, financial, sports, women's pages, wire photos, comics and classified advertisements

General Information on Newspapers

1. Reasons for publishing newspapers
2. Expense of operation of news plants
3. History of newspaper
4. Circulation and delivery
5. Dailies, biweeklies and weeklies
6. Importance of advertising
7. Income for news plants
Advertising
Circulation
8. Newspaper chains
9. World news services
10. Propaganda



The editorial staff reading the report of the committee.

11. Tabloids
12. Artists of comic strips
13. Journalism as a career
14. News gathering and editing
15. Delivery

First Reactions to Newspaper Study

1. Desire to know how newspapers are made
2. Desire to make a newspaper themselves
To carry out both of these reactions seemed to be the logical plan for the next part of the unit, so it was decided to gain more knowledge of newspapers before visiting the newspaper plant.
3. Definite plan
Large sheets of oak tag were cut, on which were pasted articles from newspapers. A study of headlines, columns, sections and spacing was made. Newspapers were taken apart and put together again to study exactness and correct spacing. Each child made such a paper.

4. Motive was to give pupils:
Experience in planning a paper
Chance to show cooperation
Opportunity to coordinate muscular skills with mental development
Enjoyment through activity

5. Pupils planned editorial staff, as follows:

Six editors were chosen by popular vote from a class of 36 pupils.

Each editor chose five pupils to complete his staff. Each pupil was assigned by the editor to a certain section of the paper.

Each group was given two large folded blank papers (oak tag). This made eight pages, 24 by 17 inches, in two sections. Each editor was responsible for a newspaper.

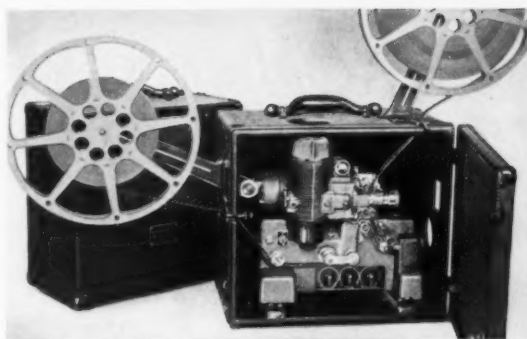


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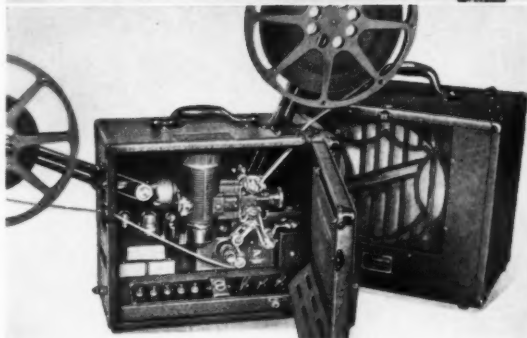
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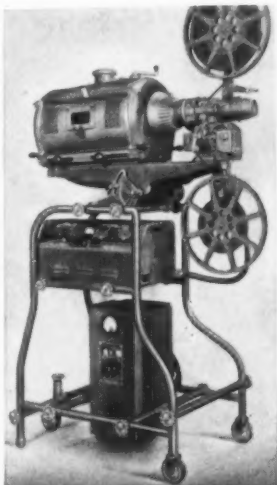
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All clippings were first approved by the editor before they were pasted into the paper.

When each paper was completed, each editor handed in a report of the cooperation of his staff members.

Results of Planning Own Paper

1. Better understanding of newspaper makeup
2. Intelligent preparation for a visit to news plant

Visit to Plant

1. Arrangements
 - (a) Place selected: *Dayton Daily News* plant
 - (b) Telephone call to plant to arrange for tour
 - (c) Telephone call to transportation company for bus
 - (d) Collection of bus fare in advance by pupil committee
2. Trip

One hour spent in viewing the following departments and equipment: business office, editorial rooms, wire-photo machine, composing room, World Wide News service room, linotype machines, type setters, proof-room, stereotype room, pressroom, bundling and tying room, delivery trucks

Outcomes of Visit

1. Realization of what it takes to make a newspaper
2. Concept of modern industry and importance of speed in newspaper making
3. Desire of pupil to make original newspaper

Outcomes in Terms of Activities and Individual Projects

1. Individual newspapers made

Each pupil made his own complete newspaper, composed of news about the school. Editorials were written on subjects suggested in class: "Fairview Needs Cafeteria," "Dismissal of School Early One Day," "The Problem of a Paper Sale," "Fire Drills," "Use of Library" and "Activities Carried on by Various Groups."

White folded paper was given to each pupil. Newspapers had eight pages. Completed papers were graded by the teacher and passed around the room for pupils to read and to judge; best articles were read to other English classes. Newspapers were pasted on the hall bulletin board for inspection by the entire school.

Subject Matter Involved

1. English
 - (a) Compositions
 - (b) Original poems
 - (c) Individual talents displayed in organization of materials
 - (d) Spelling of words used in editing newspapers
 - (e) Vocabulary greatly enlarged
 - (f) Technical grammar
 - Capitalization
 - Complete sentence formation
 - Punctuation
 - Agreement of words
 - Paragraph values
 - Correct expressions

(g) Human interest

2. New words learned

edit	monotype	feature	reporter
linotype	photoengraving	trim	circulation
type	streamer	financial	cylinder
cast	classified	journalism	halftones
stereotype	tabloid	press	editor
rewrite man	composing room	copy reader	lockup

3. Arithmetic

Pupils noticed that this subject was important in the newspaper work. They brought in through class discussion the following points as important in skills:

Spacing
Columns
Lettering
Selling of copies
Bus fare to the plant
Costs of advertising
Rates on classified advertisements
Skilled workmanship in the general makeup of the paper as to size, space and cost

4. Social science

- (a) Modern industry as compared with the past
 - Quicker work
 - Better machines
- (b) Organization of newspaper staffs
- (c) Ways of collecting news
- (d) Story of paper an interesting adventure
- (e) Delivery and organization of the newsboys
- (f) Current events in news articles
- (g) World news
- (h) General awakening on the part of pupils to read the newspapers and to know where to find the various sections
- (i) Newspapers became a hobby to some, the study carried over to interest and effect

5. Arts and crafts

- (a) Pasting and cutting of news articles
- (b) Spacing
- (c) Balance of pages
- (d) Arrangement of stories
- (e) Headlines
- (f) Printing
 - Type
 - Style
- (g) Comics, cartoons
- (h) Illustrations
- (i) Art

6. Writing

Individual expression led to many varieties
Manuscript and print
Cursive writing
Typewriter
(The main idea was that each child tried to have his material legible. Thus this type of expression was important and there was a conscious effort to have a good paper.)

Outcomes in Terms of Social Values

1. Characteristics developed by group work
 - (a) Cooperation
 - (b) Sharing
 - (c) Tolerance
 - (d) Initiative
 - (e) Creativity
 - (f) Balanced judgment
2. Results of visit to plant
 - (a) Appreciation of the newspaper and staff
 - (b) Appreciation of modern methods of machinery
 - (c) Desire to observe newspapers in general
 - (d) Feeling of kindness toward newspaper delivery boys
 - (e) Good sportsmanship in writing articles about fellow classmates
 - (f) Ability to take criticism and to give it fairly
 - (g) Understanding of the newspaper industry



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Flag Salute Before the Bench

COMPULSORY participation in the daily or weekly ceremony of saluting the flag in public schools has been the subject of pronouncements by state or federal courts no less than eight times within the last three years. In all the cases the plaintiffs were members of the religious organization known as Jehovah's Witnesses and alleged that the requirement infringed their liberty of conscience because of their belief that the Bible forbids the rendering of any such obeisance to any object save the Almighty. The highest courts of New Jersey, Massachusetts and Georgia held in 1937 that the salute bears no relation to religious freedom but is merely an overt mark of respect to the civil authority. Hence the expulsion of the pupils who refused to participate was upheld.¹

Contrary Decisions Reached

The Georgia and New Jersey cases were carried to the Supreme Court of the United States, but that tribunal dismissed them for want of a substantial federal question.² A conclusion contrary to these decisions was reached in a similar case by a California court of appeal, however, and likewise by a United States district court in Pennsylvania, holding that the plaintiff pupils were entitled to attend the public schools regardless of their refusal to take part in the compulsory patriotic ritual. Lastly, another federal district court, in a second Massachusetts case, has again sustained an expulsion for that reason.

Offhand, the opposite conclusions in two inferior federal courts would seem to favor the possibility that the issue may eventually again reach the highest federal tribunal. Whether it would be again dismissed cannot be foretold, in view of recent and future changes in the personnel of the court. At any rate, the contrasting

M. M. CHAMBERS

Specialist in School Law

opinions are of great interest as illuminating the relations between the right of freedom of conscience and the right to attend public schools. Let us inspect what is at present the minority view, represented by the California court of appeal and the federal district court in Pennsylvania.

The pupil in California, a girl, "simply stood silently" while the ritual was being performed by the others and was for that reason expelled. The court, approving her reinstatement by writ of mandate, took the view that there is a liberty of conscience that is even broader than the freedom to espouse a particular religious belief. "Liberty of conscience goes much further and, under our Constitution, so long as it does not interfere with the morals, peace or health of the public, it would appear to be controlling. . . . The record before us presents no question of morality; no question of peace; no question of health; no question of disobedience or improper conduct on the part of the petitioner. . . ." Further (quoting *California Jurisprudence*), "the right to be admitted to a public school is a valuable right which may be enforced in an appropriate proceeding. It is a privilege granted by the state constitution and is a legal right as much as a vested right in property."³

Without Due Process of Law

The federal district court in Pennsylvania, on somewhat similar reasoning, granted an injunction to prevent the school board from expelling two pupils and from requiring them to salute the flag. The rule of the board making the salute compulsory was held to contravene the constitution of the state, as well as the Fourteenth Amendment to the United States Constitution, by a deprivation of liberty without due process of law. "The liberty guaranteed

by the Fourteenth Amendment includes the liberty to entertain any religious belief and to do or to refrain from doing any act on conscientious grounds, which does not prejudice the safety, health, morals, property or personal rights of the people.

"If an individual sincerely bases his acts or refusals to act on religious grounds they must be accepted as such and may be interfered with only if it becomes necessary to do so in connection with the exercise of the police power; that is, if it appears that the public safety, health or morals or property or personal rights will be prejudiced by them. To permit public officers to determine whether the views of individuals sincerely held and their acts sincerely undertaken on religious grounds are in fact based on convictions religious in character would be to sound the death knell of religious liberty. To such a pernicious and alien doctrine this court cannot subscribe."⁴

Explanation of Inconsistency

It must be noticed that in Pennsylvania the school board rule requiring the salute had no statutory authorization other than the grant of general rule-making power to boards of education and was held by the federal court to violate the Pennsylvania constitution as well as the United States Constitution. In Massachusetts the situation is different, for there a state statute specifically requiring the salute has been sustained by the highest court of the state. This accounts, in part, for the different view taken by the federal court in Massachusetts, which denied the injunction and dismissed the complaint. "If the legislature deemed it wise to enact legislation demanding that the youth of the state give some overt expression of their loyalty to and respect for the institutions of their country, it is not for this court to condemn the legislation unless satisfied that the regulation bears no reasonable relation to some purpose

¹These cases are discussed in "You Can't Come to School", *THE NATION'S SCHOOLS* 20: 33-34 (Dec.) 1937.

²*Leoles v. Landers*, 302 U. S. 656, 58 S. Ct. 364, 82 L. Ed. 507 (1937); *Hering v. State Board of Education*, 303 U. S. 624, 58 S. Ct. 752, 82 L. Ed. 1087 (1938).

³*Gabrielli v. Knickerbocker et al.*, (Cal. App.), 74 Pac. (2d) 290 (1937).

⁴*Gobitis v. Minersville School District*, (U. S. D. C., Pa.), 21 F. Supp. 581 (1937), and 24 F. Supp. 271 (1938).



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within the competency of the state."⁵

The theory of the relation between religious and civil obligations was

⁵*Johnson et al. v. Town of Deerfield et al.*, (U. S. D. C., Mass.), 25 F. Supp. 918 (1939).

expressed thus: "The plaintiffs say that if they honestly and conscientiously believe that the salute is a religious rite, then their belief prevails and the law must yield to it.

We can find our answer to this argument in the adjudicated cases. In *Reynolds v. United States*, 98 U. S. 145, 25 L. Ed. 244, it was said that one could not exercise a practice contrary to statute because of his religious belief, Chief Justice Waite saying, 'To permit this would be to make the professed doctrines of religious belief superior to the law of the land, and in effect to permit every citizen to become a law unto himself.'"

The federal court in Massachusetts and all the state courts that have upheld the requirement of the salute have also relied heavily upon the famous concurring opinion of the late Justice Cardozo in the United States Supreme Court decision which sustained the right of the University of California to maintain compulsory military training and to expel students who refused to take it, in which he said: "The conscientious objector, if his liberties were to be thus extended, might refuse to contribute taxes in furtherance of a war, whether for attack or defense, or in furtherance of any other end condemned by his conscience as irreligious or immoral. The right of private judgment has never yet been so exalted above the powers and the compulsion of the agencies of government. One who is a martyr to a principle—which may turn out in the end to be a delusion or an error—does not prove by his martyrdom that he has kept within the law."⁶

The federal judge in the Pennsylvania case above described, however, distinguished the flag salute in public schools from military training in a state university. Children of compulsory school age, said he in substance, are required by law to attend some school, but no one is compelled to attend a university; military training may be said to bear a direct relation to the public safety, but the flag salute does not.

As it now stands, the question of the compulsory patriotic ritual is evidently not finally settled. In determining the reasonableness of such compulsions, the courts do not ignore the well-considered opinions of educators. What will be the verdict of the educational profession concerning the compulsory flag salute?

⁶*Hamilton v. Regents of University of California*, 293 U. S. 245, 55 S. Ct. 197, 79 L. Ed. 150 (1934).

The Thompson Plan

LEE M. THURSTON

Professor of Education University of Pittsburgh

MANY school administrators have eagerly awaited the time when a state would embark on a large school building program. The reason for their eagerness was the desire to ascertain the effect of generous state aid for buildings in equalizing educational opportunities, eliminating inefficient units and reorganizing rural schools on the natural community basis. Such a measure has come near to realization in Pennsylvania.

By action of the general assembly in special session in the summer of 1938, the general state authority of Pennsylvania had its powers extended to construct school buildings and to lease them to school districts on a rental basis which, when joined with a rental paid by the state, would amortize the cost of construction within thirty years. The acts, introduced by Sen. Edward J. Thompson, make up the so-called Thompson Plan of school building construction.

The acts of assembly established a sliding scale of assistance by which school districts of the greatest wealth (with a true valuation of \$200,000 or more per teacher) would be required to pay 49.5 per cent of the cost of the project, the amount paid by the district diminishing as the true valuation per teacher diminished until the districts of least wealth (with a true valuation of \$25,000 or less per teacher) would be required to pay only 16.5 per cent of the cost of the project. The remainder of the cost was to be shared by the federal government, under P.W.A. provisions, and the state itself.

These acts were designed to effect a wholesale reorganization of school districts. Applications were to be approved only when they were based on full and careful study of ultimate educational needs. These studies, required by an earlier act of the assembly, had, in most cases, been car-

ried forward by the county school superintendents. The state-wide building program was the logical outgrowth of this program of research in school building needs and was designed to give adequate educational facilities to all communities unable to provide them at their own expense.

The probable effect of the Thompson Plan may be perceived by examining a few Pennsylvania counties. In Mercer County there are 46 school districts; the plan would reduce this number to 12 or 13 by the construction of consolidated schools. In Crawford County the plan contemplated a reduction from 53 districts to 12; there would be nine building projects for each of nine consolidations. In Erie County, exclusive of cities, 13,000 children now attend school in 38 districts; it was proposed to form 15 districts, increasing the pupil population per district from 342 to 866. Even in densely populated Allegheny County, in which Pittsburgh is located, with 98 districts under county jurisdiction, 35 building projects were approved by the state.

When the last application was approved it was found that the plan would involve the closing of a total of 1672 one room schools, 211 two room schools and 79 three or four room schools; that there would be 736 building projects, including 273 new elementary schools, 161 new secondary schools and eight new combination elementary-secondary schools. All this would cost \$91,000,000, to be shared by the districts, the state and the federal government.

But the general assembly has not appropriated funds needed for the state's share, and the P.W.A., in the absence of assurance of state financing, has allocated no federal funds. Thus the Thompson Plan is now held in abeyance for lack of the necessary appropriations.



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Figuring Food Costs Rapidly

IN THE business of selling foods, no matter how extensive or limited the volume, it is essential that all cost be analyzed. The following questions and similar ones must be answered by the cafeteria manager for every item of food sold:

Can sandwiches be sold for 5 cents and a special plate for 10 cents if the cafeteria is to spend no more than 65 per cent of its income for the purchase of food? If vegetables cannot be sold if priced higher than 5 cents a serving, how much can the serving cost if the food is to be held to 65 per cent and labor is 30 per cent? If the plate lunch is to be sold for

12 cents, what part of this goes for food and what part for labor on the basis of the percentage for each which is established as an operating policy?

In determining (a) prices that must be charged or (b) the amount of the fixed price that may be spent for food, labor and other expenses on the basis of established operating percentages, the accompanying tables will be of use. It is necessary to

know the costs of all recipes and individual portion costs in order to use the tables.

Calculations from 1 to 100 per cent have been split three ways to cover: (1) a range suitable for food percentages, 40 through 80; (2) a range suitable for labor percentages, 20 through 39; (3) a range suitable for other operating expense percentages, 1 through 19.

Selling prices from 1 cent to \$1 are

GRACE STOWELL SAUNDERS

Supervisor of Cafeterias, Syracuse, N. Y.

Operating Cost Charts

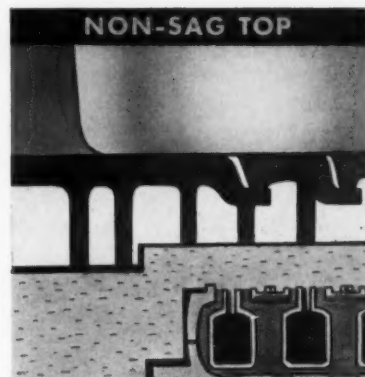
FOOD PURCHASES

Selling Price	40%	41%	42%	43%	44%	45%	46%	47%	48%	49%	50%	51%	52%	53%	54%	55%	56%	57%	58%	59%
\$.01.....	.004	.0041	.0042	.0043	.0044	.0045	.0046	.0047	.0048	.0049	.005	.0051	.0052	.0053	.0054	.0055	.0056	.0057	.0058	.0059
.02.....	.008	.0082	.0084	.0086	.0088	.009	.0092	.0094	.0096	.0098	.01	.0102	.0104	.0106	.0108	.011	.0112	.0114	.0116	.0118
.03.....	.012	.0123	.0126	.0129	.0132	.0135	.0138	.0141	.0144	.0147	.015	.0153	.0156	.0159	.0162	.0165	.0168	.0171	.0174	.0177
.05.....	.02	.0205	.021	.0215	.022	.0225	.023	.0235	.024	.0245	.025	.0255	.026	.0256	.027	.0275	.028	.0285	.029	.0295
.06.....	.024	.0246	.0252	.0258	.0264	.027	.0276	.0282	.0288	.0294	.03	.0306	.0312	.0318	.0324	.033	.0336	.0342	.0348	.0354
.07.....	.028	.0287	.0294	.0301	.0308	.0315	.0322	.0329	.0336	.0343	.035	.0357	.0364	.0371	.0378	.0385	.0392	.0399	.0406	.0413
.08.....	.032	.0328	.0336	.0344	.0352	.036	.0368	.0376	.0384	.0392	.04	.0408	.0416	.0424	.0432	.044	.0448	.0456	.0464	.0472
.10.....	.04	.041	.042	.043	.044	.045	.046	.047	.048	.049	.05	.051	.052	.053	.054	.055	.056	.057	.058	.059
.12.....	.048	.0492	.0504	.0516	.0528	.054	.0552	.0564	.0576	.0588	.06	.0612	.0624	.0636	.0648	.066	.0672	.0684	.0696	.0708
.15.....	.06	.0615	.063	.0645	.066	.0675	.069	.0705	.072	.0735	.075	.0765	.078	.0795	.08	.0825	.084	.0855	.087	.0885
.18.....	.072	.0738	.0756	.0774	.0792	.081	.0828	.0846	.0864	.0882	.09	.0918	.0936	.0954	.0972	.099	.1008	.1026	.1044	.1062
.20.....	.08	.082	.084	.086	.088	.09	.092	.094	.096	.098	.10	.102	.104	.106	.108	.11	.112	.114	.116	.118
.25.....	.10	.1025	.105	.1075	.11	.1125	.115	.1175	.12	.1225	.125	.1275	.13	.1325	.135	.1375	.14	.1425	.145	.1475
.30.....	.12	.123	.126	.129	.132	.135	.138	.141	.144	.147	.15	.153	.156	.159	.162	.165	.168	.171	.174	.177
.35.....	.14	.1435	.147	.1505	.154	.1575	.161	.1645	.168	.1715	.175	.1785	.182	.1855	.189	.1925	.196	.1995	.203	.2065
.40.....	.16	.164	.168	.172	.176	.18	.184	.188	.192	.196	.20	.204	.208	.212	.216	.22	.224	.228	.232	.236
.45.....	.18	.1845	.189	.1935	.198	.2025	.207	.2115	.216	.2205	.225	.2295	.234	.2385	.243	.2475	.252	.2565	.261	.2655
.50.....	.20	.205	.21	.215	.22	.225	.23	.235	.24	.245	.25	.255	.26	.265	.27	.275	.28	.285	.29	.295
.55.....	.22	.225	.231	.2365	.242	.2475	.253	.2585	.264	.2695	.275	.2805	.286	.2915	.297	.3025	.308	.3135	.319	.3245
.60.....	.24	.246	.252	.258	.264	.27	.276	.282	.288	.294	.30	.306	.312	.318	.324	.33	.336	.342	.348	.354
.65.....	.26	.2665	.273	.2795	.286	.2925	.299	.3055	.312	.3185	.325	.3315	.338	.3445	.351	.3575	.364	.3705	.377	.3835
.70.....	.28	.287	.294	.301	.308	.315	.322	.329	.336	.343	.35	.357	.364	.371	.378	.385	.392	.399	.406	.413
.75.....	.30	.3075	.315	.3225	.33	.3375	.345	.3525	.36	.3675	.375	.3825	.39	.3975	.415	.4125	.42	.4275	.435	.4425
.80.....	.32	.328	.336	.344	.352	.36	.368	.376	.384	.392	.40	.408	.416	.424	.432	.44	.448	.456	.474	.482
.85.....	.34	.3485	.357	.3655	.374	.3825	.391	.3995	.408	.4165	.425	.4335	.442	.4505	.459	.4675	.476	.4845	.493	.5015
.90.....	.36	.369	.378	.387	.396	.405	.414	.423	.432	.441	.45	.459	.468	.477	.486	.495	.504	.513	.522	.531
.95.....	.38	.3895	.399	.4085	.418	.4275	.437	.4465	.456	.4655	.475	.4845	.494	.5035	.513	.5225	.532	.5415	.551	.5605
1.00.....	.40	.41	.42	.43	.44	.45	.46	.47	.48	.49	.50	.51	.52	.53	.54	.55	.56	.57	.58	.59

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cluded in the left vertical column of each table. By starting at the vertical column representing the percentage that is to be spent for any expense item and reading down this column to the point at which it intersects the horizontal column, which presents the selling price, it is possible to read off immediately the amount of the selling price that is spent for the expense item under consideration.

For example, assume that the selling price of a combination plate is to be 12 cents in a cafeteria operating on a 65 per cent food percentage, 30 per cent labor, 5 per cent other operating expenses.

Then, by reading down the 65 per cent column to the point of intersection with the 12 cent horizontal column, we find that the raw food cost on the plate may run to 7.8 cents; labor will amount to \$.036 and other operating items to \$.006. Knowing the portion costs of all items prepared in the cafeteria, the manager can readily prepare a combination of foods for the plate whose total cost will not exceed \$.078.

combination of foods for the plate whose total cost will not exceed \$.078.

The food percentage figure also may be used to determine selling price. For example, assume that the cafeteria operates on a 62 per cent food percentage and that the cost of a serving of new peas is approximately 2 cents. Reading down the 62 per cent column to the figure nearest 2 cents, i.e. \$.0186, then horizontally across to the cost column, we find that a charge of 3 cents must be made for the peas.

The charts may be used for a commercial cafeteria in a similar fashion and with equal satisfaction.

FOOD FOR THOUGHT

5 Cent Specials

• Rachel P. Taylor, manager of school cafeterias in New Castle, Pa., has a wide assortment of 5 cent dishes which, she says, draw smiles and exclamations of "Oh, goody," when the children see them on the counter. For example, she serves a hot barbecue sandwich made

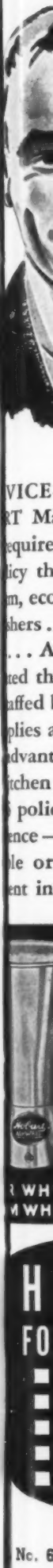
of first grade hamburger, floured, browned in the oven and seasoned with catsup. Boiling water is added with thickening to make a gravy of medium consistency. Then the bun is cut and a spoonful of gravy is put in the center and over the top layer. She allows 1 pound of hamburger to eight sandwiches. Other "best sellers" among the 5-centers are:

Pork chow mein over Chinese noodles; creamed tuna, peas and pimientos over baking powder biscuit; creamed diced ham and mushrooms on toast; baked noodles (broad noodles layered with ground beef and pork, tomatoes, grated cheese and a small amount of onion); creamed fresh carrots and celery; baked spinach; kidney bean, egg, celery and olive salad; molded cottage cheese, crushed pineapple and pecans in lemon gelatin for salad; oranges, ground cranberries and celery in orange gelatin for salad; chocolate Boston cream pie; cherry custard cake; lemon chiffon pie, and date nut cup.

All these are in addition, of course, to the ever popular home prepared baked beans, macaroni, spaghetti, beef stew on biscuit, meat loaf and potatoes of all kinds.

FOOD PURCHASES—Continued

	60%	61%	62%	63%	64%	65%	66%	67%	68%	69%	70%	71%	72%	73%	74%	75%	76%	77%	78%	79%	80%
1	.006	.0061	.0062	.0063	.0064	.0065	.0066	.0067	.0068	.0069	.007	.0071	.0072	.0073	.0074	.0075	.0076	.0077	.0078	.0079	.008
2	.012	.0122	.0124	.0126	.0128	.013	.0132	.0134	.0136	.0138	.014	.0142	.0144	.0146	.0148	.015	.0152	.0154	.0156	.0158	.016
3	.018	.0183	.0186	.0189	.0192	.0195	.0198	.0201	.0204	.0207	.021	.0213	.0216	.0219	.0222	.0225	.0228	.0231	.0234	.0237	.024
5	.03	.0305	.031	.0315	.032	.0325	.033	.0335	.034	.0345	.035	.0355	.036	.0365	.037	.0375	.038	.0385	.039	.0395	.04
6	.036	.0366	.0372	.0378	.0384	.039	.0396	.0402	.0408	.0414	.042	.0426	.0432	.0438	.0444	.045	.0456	.0462	.0468	.0474	.048
7	.042	.0427	.0434	.0441	.0448	.0455	.0462	.0469	.0476	.0483	.049	.0497	.0504	.0511	.0518	.0525	.0532	.0539	.0546	.0553	.056
8	.048	.0488	.0496	.0504	.0512	.052	.0528	.0536	.0544	.0552	.056	.0568	.0576	.0584	.0592	.06	.0608	.0616	.0624	.0632	.064
10	.06	.061	.062	.063	.064	.065	.066	.067	.068	.069	.07	.071	.072	.073	.074	.075	.076	.077	.078	.079	.08
20	.072	.0732	.0744	.0756	.0768	.078	.0792	.0804	.0816	.0828	.084	.0852	.0864	.0876	.0888	.09	.0912	.0924	.0936	.0948	.096
50	.09	.0915	.093	.0945	.096	.0975	.099	.1005	.102	.1035	.105	.1065	.108	.1095	.111	.1125	.114	.1155	.117	.1185	.12
80	.108	.1098	.1116	.1134	.1152	.117	.1188	.1206	.1224	.1242	.126	.1278	.1296	.1314	.1332	.135	.1368	.1386	.1404	.1422	.144
100	.12	.122	.124	.126	.128	.13	.132	.134	.136	.138	.14	.142	.144	.146	.148	.15	.152	.154	.156	.158	.16
150	.15	.1525	.155	.1575	.16	.1625	.165	.1675	.17	.1725	.175	.1775	.18	.1825	.185	.1875	.19	.1925	.195	.1975	.20
200	.18	.183	.186	.189	.192	.195	.198	.201	.204	.207	.21	.213	.216	.219	.222	.225	.228	.231	.234	.237	.24
250	.21	.2135	.217	.2205	.224	.2275	.231	.2345	.238	.2415	.245	.2485	.252	.2555	.259	.2625	.266	.2695	.273	.2765	.28
300	.24	.244	.248	.252	.256	.26	.264	.268	.272	.276	.28	.284	.288	.292	.296	.30	.304	.308	.312	.316	.32
350	.27	.2745	.279	.2835	.288	.2925	.297	.3015	.306	.3105	.315	.3195	.324	.3285	.333	.3375	.342	.3465	.351	.3555	.36
400	.30	.305	.31	.315	.32	.325	.33	.335	.34	.345	.35	.355	.36	.365	.37	.375	.38	.385	.39	.395	.40
450	.33	.3355	.341	.3465	.352	.3575	.363	.3685	.374	.3795	.385	.3905	.396	.4015	.407	.4125	.418	.4235	.429	.4345	.44
500	.36	.366	.372	.378	.384	.39	.396	.402	.408	.414	.42	.426	.432	.438	.444	.45	.456	.462	.468	.474	.48
550	.39	.3965	.403	.4095	.416	.4225	.429	.4355	.442	.4485	.455	.4615	.468	.4745	.481	.4875	.494	.5005	.507	.5135	.52
600	.42	.427	.434	.441	.448	.455	.462	.469	.476	.483	.49	.497	.504	.511	.518	.525	.532	.539	.546	.553	.56
650	.455	.4575	.465	.4725	.48	.4875	.495	.5025	.51	.5175	.525	.5325	.54	.5475	.555	.5625	.57	.5775	.585	.5925	.60
700	.48	.488	.496	.504	.512	.52	.528	.536	.544	.552	.56	.568	.576	.584	.592	.60	.608	.616	.624	.632	.64
750	.51	.5185	.527	.5355	.544	.5525	.561	.5695	.578	.5865	.595	.6035	.612	.6205	.629	.6375	.646	.6545	.663	.6715	.68
800	.54	.549	.558	.567	.576	.585	.594	.603	.612	.621	.63	.639	.648	.657	.666	.675	.684	.693	.702	.711	.72
850	.57	.5795	.589	.5985	.608	.6175	.627	.6365	.646	.6555	.665	.6745	.684	.6935	.703	.7125	.722	.7315	.741	.7505	.76
900	.60	.61	.62	.63	.64	.65	.66	.67	.68	.69	.70	.71	.72	.73	.74	.75	.76	.77	.78	.79	.80

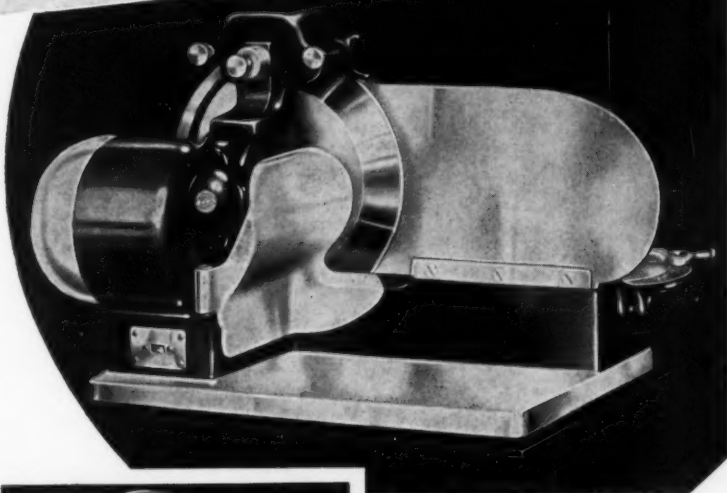




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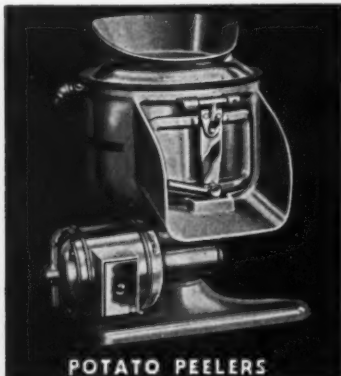


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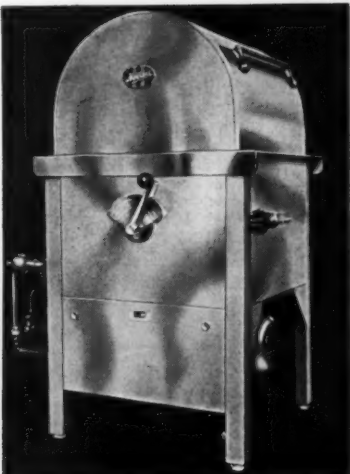
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\$.01	.002	.0021	.0022	.0023	.0024	.0025	.0026	.0027	.0028	.0029	.003	.0031	.0032	.0033	.0034	.0035	.0036	.0037	.0038	.0039
.02	.004	.0042	.0044	.0046	.0048	.005	.0052	.0054	.0056	.0058	.006	.0062	.0064	.0066	.0068	.007	.0072	.0074	.0076	.0078
.03	.006	.0063	.0066	.0069	.0072	.0075	.0078	.0081	.0084	.0087	.009	.0093	.0096	.0099	.0102	.0105	.0108	.0111	.0114	.0117
.05	.01	.0105	.011	.0115	.012	.0125	.013	.0135	.014	.0145	.015	.0155	.016	.0165	.017	.0175	.018	.0185	.019	.0195
.06	.012	.0126	.0132	.0138	.0144	.015	.0156	.0162	.0168	.0174	.018	.0186	.0192	.0198	.0204	.021	.0216	.0222	.0228	.0234
.07	.014	.0147	.0154	.0161	.0168	.0175	.0182	.0189	.0196	.0203	.021	.0217	.0224	.0231	.0238	.0245	.0252	.0259	.0266	.0273
.08	.016	.0168	.0176	.0184	.0192	.02	.0208	.0216	.0224	.0232	.024	.0248	.0256	.0264	.0272	.028	.0288	.0296	.0304	.0312
.10	.02	.021	.022	.023	.024	.025	.026	.027	.028	.029	.03	.031	.032	.033	.034	.035	.036	.037	.038	.039
.12	.024	.0252	.0264	.0276	.0288	.03	.0312	.0324	.0336	.0348	.036	.0372	.0384	.0396	.0408	.042	.0432	.0444	.0456	.0468
.15	.03	.0315	.033	.0345	.036	.0375	.039	.0405	.042	.0435	.045	.0465	.048	.0495	.051	.0525	.054	.0555	.057	.0585
.18	.036	.0378	.0396	.0414	.0432	.045	.0468	.0486	.0504	.0522	.054	.0558	.0576	.0594	.0612	.063	.0648	.0666	.0684	.0702
.20	.04	.042	.044	.046	.048	.05	.052	.054	.056	.058	.06	.062	.064	.066	.068	.07	.072	.074	.076	.078
.25	.05	.0525	.055	.0575	.06	.0625	.065	.0675	.07	.0725	.075	.0775	.08	.0825	.085	.0875	.09	.0925	.095	.0975
.30	.06	.063	.066	.069	.072	.075	.078	.081	.084	.087	.09	.093	.096	.099	.102	.105	.108	.111	.114	.117
.35	.07	.0735	.077	.0805	.084	.0875	.091	.0945	.098	.1015	.105	.1085	.112	.1155	.119	.1225	.126	.1295	.133	.1365
.40	.08	.084	.088	.092	.096	.10	.104	.108	.112	.116	.12	.124	.128	.132	.136	.14	.144	.148	.152	.156
.45	.09	.0945	.099	.1035	.108	.1125	.117	.1215	.126	.1305	.135	.1395	.144	.1495	.153	.1575	.162	.1665	.171	.1755
.50	.10	.105	.11	.115	.12	.125	.13	.135	.14	.145	.15	.155	.16	.165	.17	.175	.18	.185	.19	.195
.55	.11	.1155	.121	.1265	.132	.1375	.143	.1485	.152	.1595	.165	.1705	.176	.1815	.187	.1925	.198	.2035	.209	.2145
.60	.12	.126	.132	.138	.144	.15	.156	.162	.168	.174	.18	.186	.192	.198	.204	.21	.216	.222	.228	.234
.65	.13	.1365	.143	.1495	.156	.1625	.168	.1755	.182	.1885	.195	.2015	.208	.2145	.221	.2275	.234	.2405	.247	.2535
.70	.14	.147	.154	.161	.168	.175	.182	.189	.196	.203	.21	.2175	.224	.231	.238	.245	.252	.259	.266	.273
.75	.15	.1575	.165	.1725	.18	.1875	.195	.2025	.21	.2175	.225	.2325	.24	.2475	.255	.2625	.27	.2775	.285	.2925
.80	.16	.168	.176	.184	.192	.20	.208	.216	.224	.232	.24	.248	.256	.264	.272	.28	.288	.296	.304	.312
.85	.17	.1785	.187	.1955	.204	.2125	.221	.2295	.238	.2465	.255	.2635	.272	.2805	.289	.2975	.306	.3145	.323	.3315
.90	.18	.189	.198	.207	.216	.225	.234	.243	.252	.261	.27	.279	.288	.297	.306	.315	.324	.333	.342	.351
.95	.19	.1995	.209	.2185	.228	.2375	.247	.2565	.266	.2755	.285	.2945	.304	.3135	.323	.3325	.342	.3515	.361	.3705
1.00	.20	.21	.22	.23	.24	.25	.26	.27	.28	.29	.30	.31	.32	.33	.34	.35	.36	.37	.38	.39

OTHER OPERATING EXPENSES (Laundry, Insurance, Repairs, Equipment Replacement, Rent, Heat, Fuel Depreciation)

S. P.	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	17%	18%	19%
\$.01	.0001	.0002	.0003	.0004	.0005	.0006	.0007	.0008	.0009	.001	.0011	.0012	.0013	.0014	.0015	.0016	.0017	.0018	.0019
.02	.0002	.0004	.0006	.0008	.001	.0012	.0014	.0016	.0018	.002	.0022	.0024	.0026	.0028	.003	.0032	.0034	.0036	.0038
.03	.0003	.0006	.0009	.0012	.0015	.0018	.0021	.0024	.0027	.003	.0033	.0036	.0039	.0042	.0045	.0048	.0051	.0054	.0057
.05	.0005	.001	.0015	.002	.0025	.003	.0035	.004	.0045	.005	.0055	.006	.0065	.007	.0075	.008	.0085	.009	.0095
.06	.0006	.0012	.0018	.0024	.003	.0036	.0042	.0048	.0054	.006	.0066	.0072	.0078	.0084	.09	.0096	.0102	.0103	.0114
.07	.0007	.0014	.0021	.0028	.0035	.0042	.0049	.0056	.0064	.007	.0077	.0084	.0091	.0098	.0105	.0112	.0119	.0126	.0133
.08	.0008	.0016	.0024	.0032	.004	.0048	.0056	.0064	.0072	.008	.0088	.0096	.0104	.0112	.012	.0128	.0136	.0144	.0152
.10	.001	.002	.003	.004	.005	.006	.007	.008	.009	.01	.011	.012	.013	.014	.015	.016	.017	.018	.019
.12	.0012	.0024	.0036	.0048	.006	.0072	.0084	.0096	.0108	.012	.0132	.0144	.0156	.0178	.019	.0192	.0204	.0216	.0228
.15	.0015	.003	.0045	.006	.0075	.008	.0105	.012	.0135	.015	.0165	.018	.0195	.021	.0225	.024	.0255	.027	.0285
.18	.0018	.0036	.0054	.0072	.009	.0108	.0126	.0144	.0162	.018	.0198	.0216	.0234	.0252	.027	.0288	.0306	.0324	.0342
.20	.002	.004	.006	.008	.01	.012	.014	.016	.018	.02	.022	.024	.026	.028	.03	.032	.034	.036	.038
.25	.0025	.005	.0075	.01	.0125	.015	.0175	.02	.0225	.025	.0275	.03	.0325	.035	.0375	.04	.0425	.045	.0475
.30	.003	.006	.009	.012	.015	.018	.021	.024	.027	.03	.033	.036	.039	.042	.045	.048	.051	.054	.057
.35	.0035	.007	.0105	.014	.0175	.021	.0245	.028	.0315	.035	.0385	.042	.0455	.049	.0525	.056	.0595	.063	.0665
.40	.004	.008	.012	.016	.02	.024	.028	.032	.036	.04	.044	.048	.052	.056	.06	.064	.068	.072	.076
.45	.0045	.0125	.0135	.018	.0225	.027	.0315	.036	.0405	.045	.0495	.054	.0585	.063	.0675	.072	.0765	.081	.0855
.50	.005	.01	.015	.02	.025	.03	.035	.04	.045	.05	.055	.06	.065	.07	.075	.08	.085	.09	.095
.55	.0055	.011	.0165	.022	.0275	.033	.0385	.044	.0495	.055	.0605	.066	.0715	.077	.0825	.088	.0935	.099	.1045
.60	.006	.012	.018	.024	.03	.036	.042	.048	.054	.06	.066	.072	.078	.084	.09	.096	.102	.108	.114
.65	.0065	.013	.0195	.026	.0325	.039	.0455	.052	.0585	.065	.0715	.078	.0845	.091	.0975	.104	.1105	.117	.1235
.70	.007	.014	.021	.028	.035	.042	.049	.056	.063	.07	.077	.084	.091	.098	.105	.112	.119	.126	.133
.75	.0075	.015	.0225	.03	.0375	.045	.0525	.06	.0675	.075	.0825	.09	.0975	.105	.1125	.12	.1275	.135	.1425
.80	.008	.016	.024	.032	.04	.048	.056	.064	.072	.08	.088	.096	.104	.112	.12	.128	.136	.144	.152
.85	.0085	.017	.0255	.034	.0425	.051	.0595	.068	.0765	.085	.0935	.102	.1105	.119	.1275	.136	.1445	.153	.1615
.90	.009	.018	.027	.036	.045	.054	.063	.072	.081	.09	.099	.108	.117	.126	.135	.144	.153	.162	.171
.95	.0095	.019	.0285	.038	.0475	.057	.0665	.076	.0855	.095	.1045	.114	.1235	.133	.1425	.152	.1615	.171	.1805
1.00	.01	.02	.03	.04	.05	.06	.07	.08	.09	.10	.11	.12	.13	.14	.15	.16	.17	.18	.19

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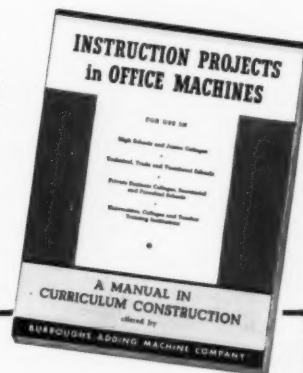
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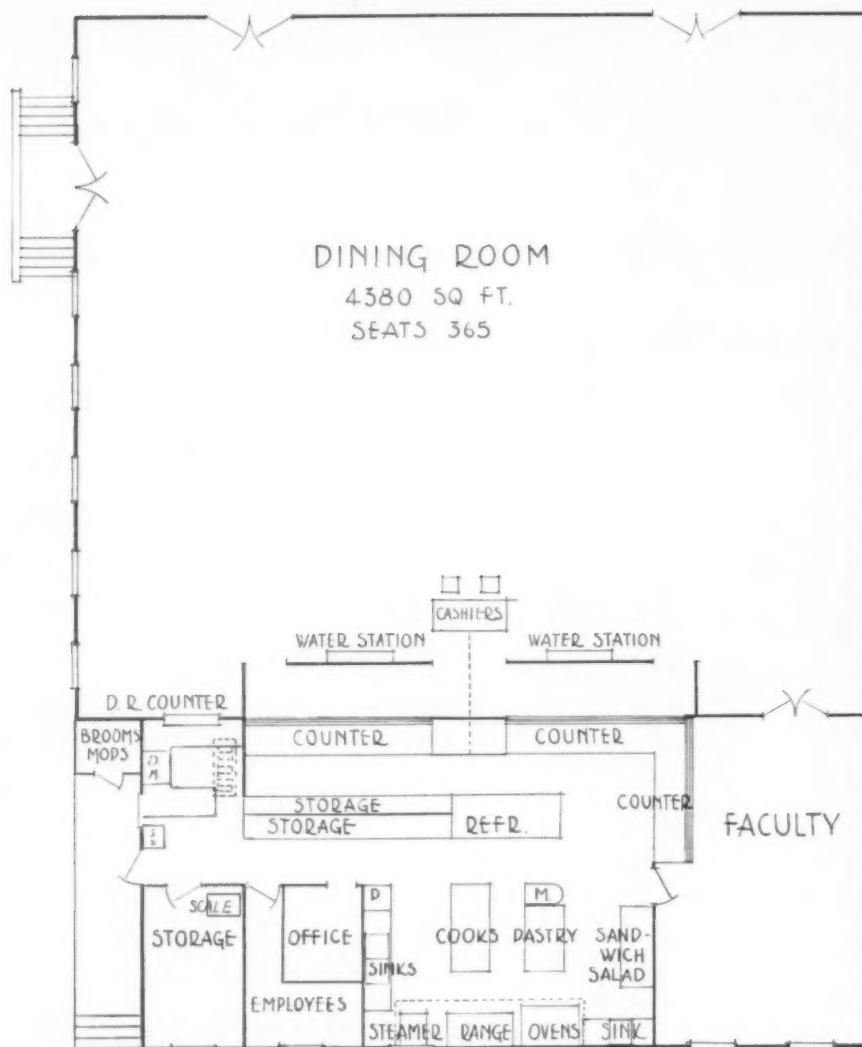


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SUGGESTIONS as to cafeteria layout in the accompanying line drawing are made in the main from the plan of the Ralph Waldo Emerson Junior High School, Los Angeles. The plan for the high school was prepared by A. S. Niebecker Jr., business manager and architect, board of education, Los Angeles.

1. Note the convenient delivery entrance with a mop and broom closet on the outside platform. The store-room adjoins the delivery entrance and is separated from the kitchen by a wire partition.

2. The office is located to give good stores and kitchen control. It is desirable to use a glass rather than a solid partition.

3. A small peeler is located on the end of the vegetable sink. On preparation, the vegetables move directly

to the steamer and the kitchen range.

4. Another small sink is provided for salad preparation and for the use of the baker.

5. The mixer is used by both cook and baker.

6. Cook's and baker's tables are placed at right angles to the cooking section to permit easy access to the serving area.

7. A two-way refrigerator provides for milk, salads and desserts.

8. Storage shelves, open on both sides, adjoin the refrigerator for the storage of dishes. This combination of shelves and refrigerator serves to separate the preparation and service areas without the use of an additional partition.

9. Dishwashing provisions permit easy access to the storage shelves.

10. A rack overhead, which may be

lowered, if desired, takes care of drying of dish towels.

11. The location of the faculty serving room facilitates service and it is possible to cover both faculty and pupil counters with the same waiters during slack service periods.

12. Entrances and exits at the end of the room help to avoid congestion at the dish window and at the counters.

Dictionary of Food

A DICTIONARY OF FOOD AND NUTRITION
By Lulu G. Graves and Clarence W. Taber. Philadelphia: F. A. Davis Company, 1938. Pp. 423. \$3.50.

At last we have a dictionary of food and nutrition that is authoritative, comprehensive, compact, well indexed and attractively bound. Lulu Graves, first president of the American Dietetic Association, nearer in the field of dietetics, and consultant dietitian, has collaborated with Clarence W. Taber, author of that useful volume "Taber's Medical Dictionary."

Foreign as well as American foods as well as old foods are included. The many forms of food preparation, commercial as well as domestic, are described; the physical and chemical changes involved are fully outlined. Medical terms relating to diet in health and disease are thoroughly discussed and the chemical and physiologic terms in the study of chemistry, physics and nutrition are explained.

The appendix carries a nine-page bibliography, a page of medical abbreviations, a table of equivalent weights and measures, a table of household measurements, a table of the equivalents of uncooked and cooked dried fruits, a table of temperatures used in baking and roasting, a table of refrigeration temperatures, as well as 45 pages devoted to the nutritive values of foods ranging in grams per average serving.

This dictionary is simple enough to be used in elementary foods courses and is advanced and complete enough to be of real value to the dietitian and the doctor.—Reviewed by EMMA FEENEY.

MODERN...MOVABLE *and* DURABLE!

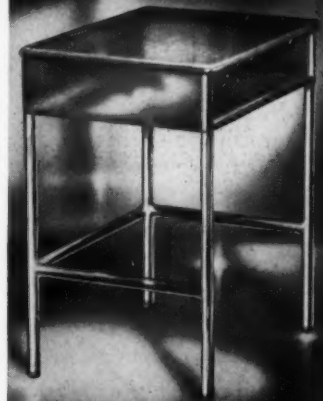
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is non-irritating and exerts bactericidal and bacteriostatic action in wounds. Be prepared with Mercurochrome for the first aid care of all minor wounds and abrasions. In more serious cases, consult a physician.

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After a thorough investigation of the evidence for and against at the close of the last period of acceptance, the Council on Pharmacy and Chemistry of the American Medical Association again reaccepted (1935) **MERCUROCHROME, H. W. & D.**
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BETTER PLANT PRACTICES



Spots on Desks

What about spots that may be found on the varnished surfaces of desks? We are told on good authority that they may be removed with the aid of a hot flatiron. It is explained that the iron should be held close to the surface and moved back and forth over the spot to warm the finish. When a hot pan or dish is lifted from a varnished surface, the varnish which has become heated will stretch like taffy. The air cools the varnish causing it to become hard and turn white. It is left in the form of minute icebergs and when heated will smooth out and regain its natural color. A note of warning is essential at this point. Do not overheat. Just enough heat should be applied so that the varnish will fall back in place.

Should the spotted surface be of shellac finish, cheesecloth dipped in alcohol brushed lightly over the spot a few times will remove it. But the strokes must be very light, otherwise the entire body surface may be cut through.

Roof Troubles

Roofs dry out rather than wear out. They become inelastic and incapable of absorbing the stresses of the building, thus causing cracks and breaks to appear. Therefore, roof maintenance, according to Troy D. Walker, field director, Oregon State Teachers Association, Portland, should aim at the postponement of this drying-out process as long as possible.

"Liquid asphalt will not stick on a steep-pitched roof so some vehicle should be provided to hold it in place," Mr. Walker explains. "Felt, with its blotting qualities, serves this purpose admirably. The protection comes from the asphalt content and not from the felt; hence, the importance of the asphalt application."

"A roof light in asphalt content will dry up long before it should, whereas, if the proper amount of asphalt is used, it will last a long time. Its life is dependent primarily upon the amount and quality of asphalt."

"All roof troubles do not originate in the roof itself. Loose coping stones, bad masonry in parapet walls and torn or worn flashings may be the source of annoying and expensive leaks. Before deterioration has advanced they can

usually be repaired at a small cost. Delay may prove costly and may even necessitate an entire new base for the roof, or a reconstructed parapet wall.

"The best policy for roof maintenance is to have the roof inspected each spring and fall by an inspector in whom confidence can be placed. Have him furnish a written report of what he finds and then check upon this report. Have the maintenance work done in accordance with the findings. There are manufacturers of good materials for resaturating roofs. Their field men will gladly supervise the application of their materials or recommend reliable roofers who are able to apply them properly. In the long run it will cost less to take proper care of a schoolhouse roof than it will to look for the cheapest way to tide over the repairs for another year or two.

"A shingle roof should not be left exposed to the weather without some cover preparation. There are many good shingle preservatives on the market today. Two most commonly used are the commercial colored shingle stain and linseed oil with coloring added. If either of these or similar preservatives are used, the application should be repeated every three years at least. It is advisable to contact a reputable shingle dealer or any national paint company for information on the proper care of shingles."

Paste Specifications

Someone was asking the other day about paste for school use, both classroom and office. Following are specifications for both paste and paste brushes furnished in the Federal Standard Stock Catalog:

"Office paste shall be of two types: (1) hard white paste; (2) semiliquid paste.

"The paste shall contain sufficient preservative to prevent decomposition and mold growths. Phenol (carbolic acid), thymol, sodium benzoate or benzoic or salicylic acid may be used for the purpose. An essential oil, such as cassia, wintergreen, clove, cinnamon, peppermint or sassafras, must be added if phenol is used, and may be added when other antiseptics are used. Formaldehyde, owing to its volatility, will

not be acceptable as a suitable antiseptic for use in paste.

"The color or the chemical composition of the paste furnished under this specification shall be such as not to cause discoloration when used with white bond paper.

"Paste furnished under these specifications shall be of even consistency throughout, and entirely free from lumps of undissolved material or grit.

"Brushes for both types of paste shall comply with the requirements listed in the following subitems. Handles shall be of sufficient length to permit easy access to all parts of the container. Bristles shall be of good grade of sterilized horsehair so fastened to the handle by a metal clamp as to prevent excessive loss of hair strands under ordinary usage. The brush end of horsehair shall not be less in width, thickness and length than the following dimensions: width, inside ferule, $\frac{1}{8}$ inch; thickness, inside ferule, $\frac{3}{8}$ inch; length, outside ferule, $\frac{3}{4}$ inch. The metal portions of the brushes shall be of aluminum or, if of other metal, shall be so lacquered as completely to protect them from corrosion caused by contact with water and paste.

"Metal tops and closures on all jar containers shall be of aluminum or, if of other metal, shall be so lacquered as completely to protect them from corrosion caused by contact with water and paste or by extreme climatic conditions. The collapsible metal tubes and caps thereon shall be of such material as to resist corrosion under the same conditions."

Kerosene for Floors

An authority attests that floors will not need to be cleaned with water at all, provided they are waxed or treated with a high grade of oil containing cleanser. Deodorized kerosene or other high-grade petroleum product is often used as one of the ingredients of the best quality of oil and cleanser. High grade kerosene alone, in fact, is a good cleanser for oiled floors if it can be properly deodorized and protected against oxidation. "It really combines with the old dirty oil to form an emulsion and brings the oil from the pores of the wood to the surface where it can be removed. Kerosene has an advantage over water as a cleaner, in that it serves as a good preservative."

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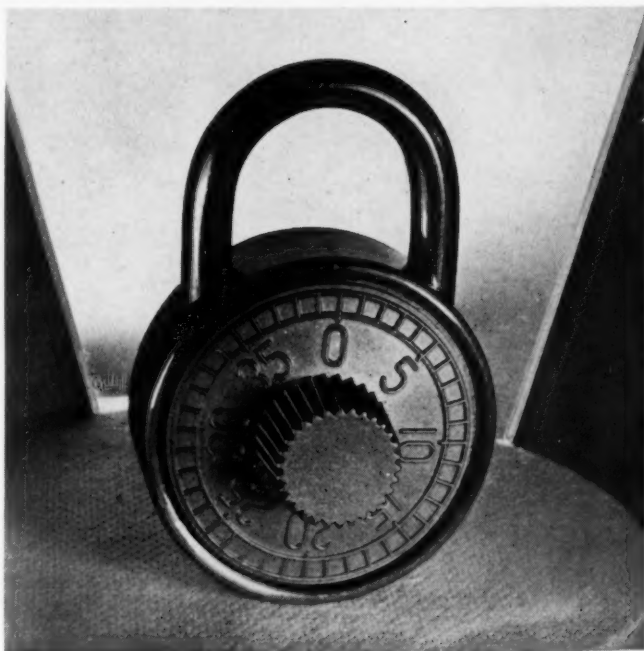
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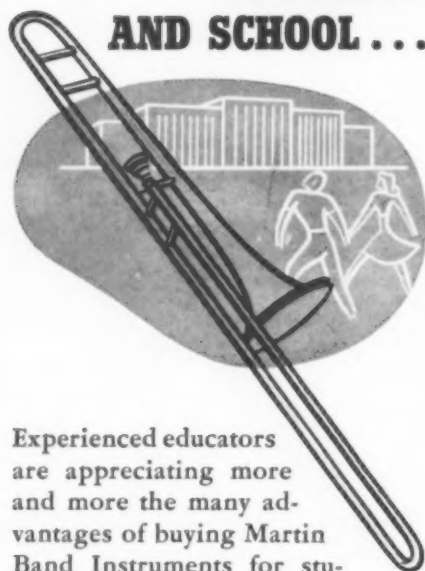
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News in Review

A.A.S.A. to St. Louis in 1940

President Ben G. Graham and the executive committee of the American Association of School Administrators have announced that the seventieth annual meeting of the association will be held in St. Louis, Feb. 24 to 29, 1940. Headquarters, registration, general session and exhibits will be in the St. Louis Municipal Auditorium.

Members of the association will have first choice of housing accommodations until July 10, according to an announcement made by S. D. Shankland, executive secretary. The assignment of rooms is governed by a resolution of the association which prohibits the assignment of rooms to nonmembers of the association or block reservations for a period of sixty days following the official announcement of the selection of the convention city. The sixty day period will expire July 10.

Members are instructed to use the official hotel reservation blank sent them by the executive secretary, which is to be mailed to the housing chairman, Philip J. Hickey, Suite 910, Syndicate Trust Building, 915 Olive Street, St. Louis.

RESEARCH

New Personality Test

A method of charting personality in children for use of elementary school teachers has been announced by three Los Angeles instructors. The co-authors claim for their research that it reveals the extent of adjustment or maladjustment in children. It includes 144 questions that require only forty-five minutes to answer.

The three men, who late last month announced the publication of the first of their findings as the "California Test of Personality," are Dr. Ernest W. Tiegs and Dr. Luis P. Thorpe of the University of Southern California and Willis W. Clark, director of administrative research for the Los Angeles County schools.

Rather than attempting to test the child's abilities or skills, the plan is based on finding out what the child believes and how he feels toward situations, the authors say. To analyze the child's personality, the teachers want to know: (1) how the child regards himself, (2) what his reactions are to friends and family and (3) what he thinks about the 144 situations asked in the questionnaire. "His feeling habits" are of first importance, believe

the authors. The plan has been studied in 1500 situations by the authors.

"To develop normal, happy and socially effective personalities in children, a 'profile' of each case is taken," explained Doctor Tiegs.

Included among the list of 144 questions of the "profile" test are: Do your classmates choose you as often as they should when playing games? Does it make you angry when you lose in games? May you bring your friends home when you want to? Can you do most of the things you try?

N. Y. C. Pupils Progress in Reading

New York City elementary school children have now surpassed the nationwide average in reading ability, according to an experiment undertaken by the board of education's research bureau.

A reading test, given to 46,000 6B pupils in 550 schools, disclosed that New York City pupils are two months above the normal rate for the entire country.

In 1935 a similar study of 22,000 children in the 6B classes disclosed that the pupils were found to be three months below the average for the country. This means, according to Dr. Stephen F. Bayne, associate superintendent, that since 1935 the New York schools have made reading gains of five months, or one full term. He attributes the gains to a concerted drive now in effect.

Special remedial classes have been organized in every high school and many of the elementary schools. Techniques and procedures tested by the W.P.A. reading project have been adopted by the regular teachers and are now a definite part of the curriculum. Coaching is given to poorer pupils.

Chicago's Country Schools

"There are within the immediate hinterland of America's second largest city no less than 869 school areas maintaining one room country schools."

This and other vestiges of obsolete educational methods are revealed by Prof. John A. Vieg of Iowa State College in "The Government of Education," a study of schools in the Chicago metropolitan area, made at the University of Chicago.

Professor Vieg's book is one of a series of researches on the Chicago metropolitan community, carried out by the Social Science Research committee of the University of Chicago.

Films in Review

ORLEANS: 2 reels, 16 and 35 mm. sound. Produced by Bernard and Company, sponsored by the French Ministry of Education and distributed by French Cinema Center, 35 West Forty-Fifth Street, New York City. Travelog, French commentary.

This French documentary film traces the history of the quaint, provincial city on the Loire from its early Roman days to 1938. It is a fine parade, presenting the medieval Abbaye de St. Benoit, a few episodes in the life of Joan the Maid, and the evolution of the thick-walled fortresses into the gracious, refined habitations known as the Chateaux of the Loire: Amboise, Blois, Chambord, Chaumont. Modern customs are depicted through a marriage ceremony in the Town Hall of Orleans, and through a group of tourists at the Chateau of Blois who faithfully follow their Southern guide as he points out the interesting phenomena in his quaint accent, rolling his r's.

Photography is excellent and the organization of the film, adequate. The commentator, obviously addressing a native audience, may be difficult to understand in this country. A complete script has been provided, however, which is distributed with the print. With supplementary aids, this film is valuable for the teaching of French history and civilization.—Reviewed by DANIEL GIRARD, assistant professor of French, Teachers College, Columbia University.

VISUAL EDUCATION

Midwest Forum Attracts 400

More than 400 directors of visual education in colleges, high schools, libraries and museums from twelve states gathered in Chicago, May 12 and 13, for the first Midwestern Forum on Visual Teaching Aids.

A similar conference will be held next year for two full days. No organization was effected but committees that planned the first forum program have been empowered to appoint subsequent committees as the occasion demands.

Classroom clinics, a feature of the program, were conceded to be the thing most needed since schoolmen are looking for information on how to use visual aids effectively in the classroom.

A demonstration was arranged by James Mitchell of the Francis Parker School, Chicago, for the high school clinic. A class of junior and senior high school pupils discussed for the

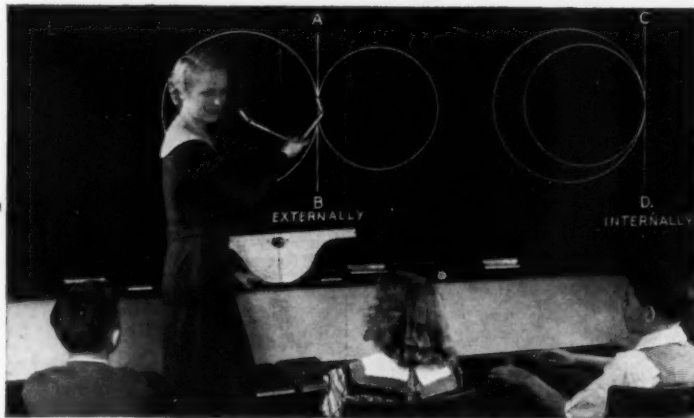
audience their reactions to the film "Pasteur and Anthrax."

Pupils of the third grade in Lincoln School, Evanston, Ill., showed an astounding understanding of the science of plant life in discussing another demonstration film. When their teacher, Ila Marie Rice, asked them if films should be substituted for textbooks their replies were as analytical as would be expected of adults. Textbooks, they declared, are essential but science films, such as the one shown, are more likely to be up to the minute in factual in-

formation than some of the older textbooks still in use.

Movies, slides and filmstrips and micro-slides in the making and in use were presented by Chicago high school men.

Ralph Jester, vice president of American Pictures, Inc., who was one of the speakers at the banquet session on May 12, explained the possibilities of using educational material from theatrical films. These condensations of theatrical films are costly because of the mechanical difficulties involved in



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There's nothing novel about the visual education idea—it has always been with us. "What's new" is the present day emphasis on visual education and the improvements and adaptations of devices with which we were already familiar.

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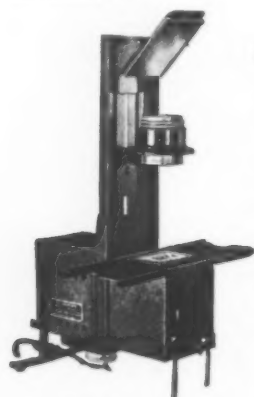
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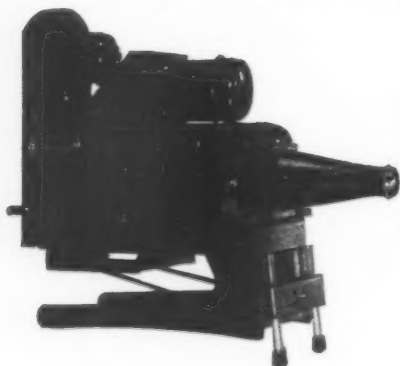
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Projects lantern slides, materials in Petrie dishes, and experiments in biology and physics such as: mercury amoeba, electrolysis, properties of magnetic fields, etc. Teacher faces class; screen is back of him.



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Lantern slides and opaque objects such as postcards, photographs, drawings, illustrations in books, mineral and biological specimens, can be projected. A film slide attachment may be added.

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BUFFALO, N. Y.

their production and educators will first have to create a market before the producers can adapt Hollywood films for educational purposes.

At the high school clinic on Friday afternoon, Robert B. Weaver of the laboratory schools, University of Chicago, spoke briefly of the wealth of educational material to be obtained from Hollywood film libraries. In cooperation with Jester, Weaver has prepared an educational study guide to supplement a commercial film that has been cut for use in teaching history. He believes that films of this type can greatly enrich the curriculum if they are supplemented by study guides to make the faulty spots educationally sound.

Film Catalog Supplement

The April 1939 quarterly supplement to the Educational Film Catalog is now off the press. This is the last supplement before the publication of the new edition of the catalog. Thirty-five visual education authorities vote on all films considered for inclusion in the catalog. Excellent films are starred and outstanding ones are double starred by the authorities who selected the films.

Films for the School Screen

Physical Education

One Meter Board—An analysis in slow motion diving with excellent closeups of arm action, the hurdle and spring for diving. Similar analyses for elementary and advanced dives follow. For intermediate and advanced divers only. 1 reel. 16 mm., sound. For rent and for purchase. Bell & Howell Company, 1801 Larchmont Avenue, Chicago.

Learn to Swim—Reel 1, group instruction with excellent analysis of breathing by slow motion and closeups. Reel 2, general survey of strokes for intermediates. 16 mm., sound. For sale now, for rent about July 1. Motion Picture Division, Department of Agriculture, Washington, D. C.

Golf—Excellent for analysis at any age or skill level. Bobby Jones, Joyce Wethered, Harry Vardon. Slow motion obviates need of closeups. Instructor's lecture essential. 3 reels. 16 mm., silent. Occasional loan for demonstration. Professional Golfers' Association, 150 Nassau Street, New York.

Basketball Fundamentals, Modern—Designed to help coaches in developing sound, successful basketball. Following introduction, showing the game's origin and essentials of

French Talking Films

A series of French talking films, entitled *Une Soirée a La Comédie Française*, prepared for students of the French language, has been released by the French Motion Picture Corporation, 126 West Forty-Sixth Street, New York. The series evolves about the plays and life of Molière. English titles have been expressly omitted for teaching purposes.

The entire series is offered in 35 mm. size at special school and university rates, if played within three months.

RADIO

Adult Programs Register Gains

A great gain was registered in the number of adult education programs and time devoted to them in 1938 as compared with 1937, Sterling Fisher, C.B.S. director of education, pointed out in his report to the C.B.S. adult education board in late April.

Totals were 897 1/2 hours and 3619 broadcasts in 1937 and 1225 1/4 hours and 4636 broadcasts in 1938. Further increases were recorded for the first

"warming up," the picture is divided into four units: (1) individual offense; (2) individual defense; (3) team offense, and (4) team defense. Directed by Coach Allen of the University of Kansas. 2 reels. 16 mm., silent. For purchase. Eastman Kodak Company, Rochester, N. Y.

Flip Flops—Good classroom film showing individual and class exercises in progression from the fundamentals of tumbling to the most advanced cross routines. 30 minutes. 16 mm., silent. For rent. Western Reserve University, Cleveland, Ohio.

Glenn Cunningham—An analysis of the style and training methods that have made Glenn Cunningham the world's fastest miler. Cunningham is seen on the campus; talking with his coach; with a group of boys; in slow motion shots which show his rhythm, breathing and general carriage. 15 minutes. 16 mm., silent. For rent. University of Kansas, Lawrence, Kan.

Davis Cup Tennis Matches, 1936-38—Each year's match may be had separately on a single reel. 3 reels. 16 mm., silent. For rent. Cinegraphic Corporation, Pasadena, Calif.



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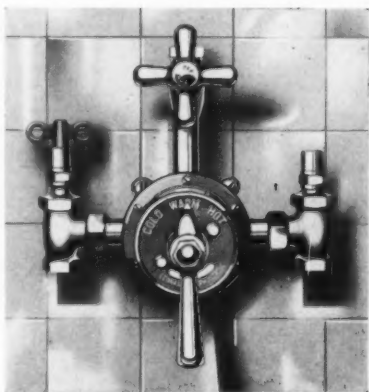
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DA-LITE MODEL C for large classrooms and assembly halls. In this model, the screen surface of either Da-lite Glass-Beaded or Da-Lite Mat White, is mounted on a heavy duty metal spring roller and a back-board which has brackets for hanging against the wall or from Da-Lite supertripods. Available in 8 sizes from 6' x 8' to 12' x 12' inclusive.

It's "Exam" Time Again FOR SCREENS AS WELL AS STUDENTS!

Increasing use of visual aids during the past school year has probably brought you many demands for new screens and for replacement of old screens which have become damaged or worn.



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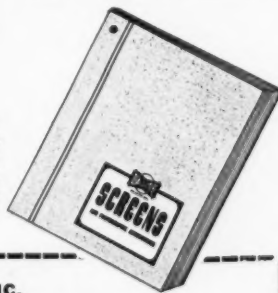
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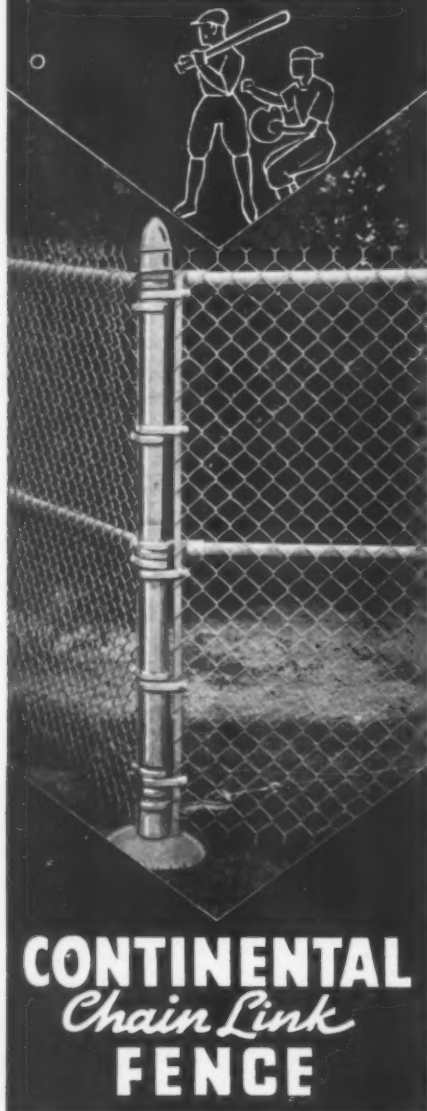
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quarter of 1939 as compared with the same period for 1938.

The C.B.S. adult education board, in completing its first fourteen months of experimentation with programs and policies, concluded that the greatest educational usefulness of radio is in its power to stimulate.

The board's recommendations for programs that should be experimentally used to fill one hour weekly of allotted evening time were for something in each of five fields: (1) industrial life, (2) history, (3) science, (4) public affairs and (5) the "process of learning." All of these ideas have been tried out in actual broadcasts except the last. No satisfactory method has yet been found for it.

The four other ideas have been experimented with in the following programs: "Living History," "Adventures in Science," "The People's Platform" and "Americans at Work."

U. S. Program Wins Award

The foremost award of the Women's National Radio Committee for the year's best radio program went to "Americans All—Immigrants All," pro-

duced jointly by the U. S. Office of Education and the Columbia Broadcasting System.

The major award went for the first time to a program sponsored by the government. Gilbert Seldes, C.B.S. director of television programs, wrote the scripts. Research for the prize program was conducted by the U. S. Office of Education.

The twelve classifications and the order in which the programs were rated are as follows:

Program furthering the principles of democracy—"Americans All—Immigrants All"; America's Town Meeting of the Air, (N.B.C. Blue); People's Platform (C.B.S.); Foundations of Democracy (C.B.S.); American Forum of the Air (M.B.S.).

Serious music, sponsored—Ford Sunday Evening Hour (C.B.S.).

Serious music, sustaining—New York Philharmonic-Symphony Orchestra (C.B.S.); N.B.C. Symphony Orchestra (Blue); Metropolitan Opera (N.B.C. Red).

Drama—Campbell Playhouse, starring Orson Welles (C.B.S.); Lux Radio Theater (C.B.S.); Woodbury Playhouse

On the Air During June

The following programs of particular interest to school people are arranged by the Columbia Broadcasting System and the National Broadcasting Company. All programs are listed in Eastern Daylight Savings Time. Watch listings for your local outlets.

Daily

12:30-1:15 p.m.—National Farm and Home Hour (NBC Blue).¹

Sunday

10:30-11:00 a.m.—Music and American Youth, programs given by public school children from cities all over the country (NBC Red).
12:30-1:00 p.m.—University of Chicago Round Table (NBC Red).

2:00-2:30 p.m.—Republic in Action, a series of programs designed to show the people of the United States how their federal government operates. Produced in cooperation with the U. S. Office of Education (CBS).
3:30-3:45 p.m.—Name the Place, geography quiz game, identifying well-known localities (NBC Red).

7:00-7:30 p.m.—The People's Platform, dinner guests of Prof. Lyman Bryson of Columbia University from all walks of life talk over current questions (CBS).

Monday

5:45-6:00 p.m.—Adventures in Science, guests interviewed by Watson Davis, director of Science Service (CBS).

6:00-6:15 p.m.—Science in the News (NBC Red).

7:45-8:00 p.m.—Science on the March (NBC Blue).

9:30-10:00 p.m.—National Radio Forum (NBC Blue).

Tuesday

1:30-1:45 p.m.—General Federation of Women's Clubs, consumers' program (NBC Red).

5:45-6:15 p.m.—March of Games, Nila Mack, director (CBS).

Wednesday

2:00-2:30 p.m.—Your Health, sponsored by the American Medical Association (NBC Blue).²
June 7—Vacations—Why and How.
June 14—Never Stop Learning.

June 21—Answering Your Questions.
6:30-6:15 p.m.—Our American Schools, dramatizations tracing growth and development of the nation's school system, Belmont Farley, narrator (NBC Red).

9:30-10:00 p.m.—Wings for the Martins. What modern education has to say on the prob-

lems of children and youth in "finding their wings." Sponsored by the U. S. Office of Education and the National Congress of Parents and Teachers (NBC Blue).

Thursday

5:45-6:15 p.m.—March of Games (CBS).

10:45-11:00 p.m.—American Viewpoints program (CBS).

Friday

2:00-3:00 p.m.—NBC Music Appreciation Hour with Dr. Walter Damrosch (NBC Blue).

Saturday

10:15-10:30 a.m.—No School Today, safety program for children (NBC Red).

10:30-10:45 a.m.—Florence Hale's talks, directed to parents, explaining methods of classroom procedure so that education may continue at home as well as in school (NBC Red).

10:45-11:00 a.m.—The Child Grows Up (NBC Blue).

11:00-12:00 noon—Cincinnati Conservatory of Music. New York Philharmonic Children's Concert alternates on third Saturday of each month (CBS).

12:00-12:25 p.m.—American Education Forum. Current series devoted to outstanding experimental colleges in the field of general education. Dr. Alvin C. Eurich of Stanford University (NBC Blue).

12:30-1:00 p.m.—Nila Mack's Let's Pretend, dramatic adaptations of fairy tales and original fantasies by the CBS director of children's programs. Roles enacted by cast of junior stock company of the air (CBS).

5:30-6:00 p.m.—"What Price America," U. S. Department of Interior program presenting the fight to regain natural resources in dramatized form (CBS).

7:00-7:30 p.m.—Americans at Work (CBS).

7:30-7:45 p.m.—Lives of Great Men, Dr. Edward Howard Griggs (NBC Red).

¹Except Sunday.

²Owing to program conflicts, there will be no Chicago broadcast of the network program. Instead a recording of the program will be broadcast over Station WENR at 8 p.m. each Wednesday.

(N.B.C. Blue); Great Plays (N.B.C. Blue).

Children's entertainment — *Nil a Mack's Let's Pretend* (C.B.S.); *Irene Wicker's Musical Plays* (N.B.C. Red).

Children's education — *American School of the Air* (C.B.S.); *Walter Damrosch's Music Appreciation Hour* (N.B.C. Blue).

News commentators—*H. B. Kaltenborn* (C.B.S.); *Paul Sullivan* (WHAS-C.B.S.).

Adult education—*The World Is Yours* (N.B.C. Red); *What Price America?* (C.B.S.); *Americans at Work* (C.B.S.).

Quiz programs—*Information Please* (N.B.C. Blue).

Light music—*Firestone Symphony* (N.B.C. Red); *Cities Service concerts* (N.B.C. Red); *American Album of Familiar Music* (N.B.C. Red).

Serial programs—*One Man's Family* (N.B.C. Red).

Variety—*Good News of 1939* (N.B.C. Red); *Charlie McCarthy only in Chase and Sanborn Hour* (N.B.C. Red).

Transcriptions of the prizewinning program, "Americans All—Immigrants All," are now available to schools in recordings. Twenty-four transcriptions are ready for distribution. A teachers' manual and student guide are given free with each purchase of recordings.

Democracy in Action

Descriptions of more than 100 federal agencies at work are being broadcast every Sunday from 2 to 2:30 p.m. (E.D.S.T.) over the Columbia network from the federal exhibits at the New York World's Fair under the auspices of the U. S. Office of Education.

The new series succeeds the U. S. Office of Education production "Americans All—Immigrants All." "Democracy in Action," as it is called, is to promote wider understanding of democratic processes and functions by showing how the American government operates and also to accent federal exhibits at the fair.

Names Its Program for Year

The tenth Institute for Education by Radio has adjudged the C.B.S. dramatization, "They Fly Through the Air With the Greatest of Ease," produced in Norman Corwin's Sunday series, "Words Without Music," the year's best educational radio program. The broadcast was a sardonic vignette in verse of the feats of the modern bomber at his work of destroying defenseless civilians.

Luncheon on the Air

The school luncheon recently made its debut on the radio in Cincinnati as part of a program "Our Cincinnati

Schools," according to Betsy W. Curtis, supervisor of lunchrooms. The purpose of this was to acquaint parents with the school lunchrooms and also to instruct them in the packing of a proper lunch for the school child to carry from home.

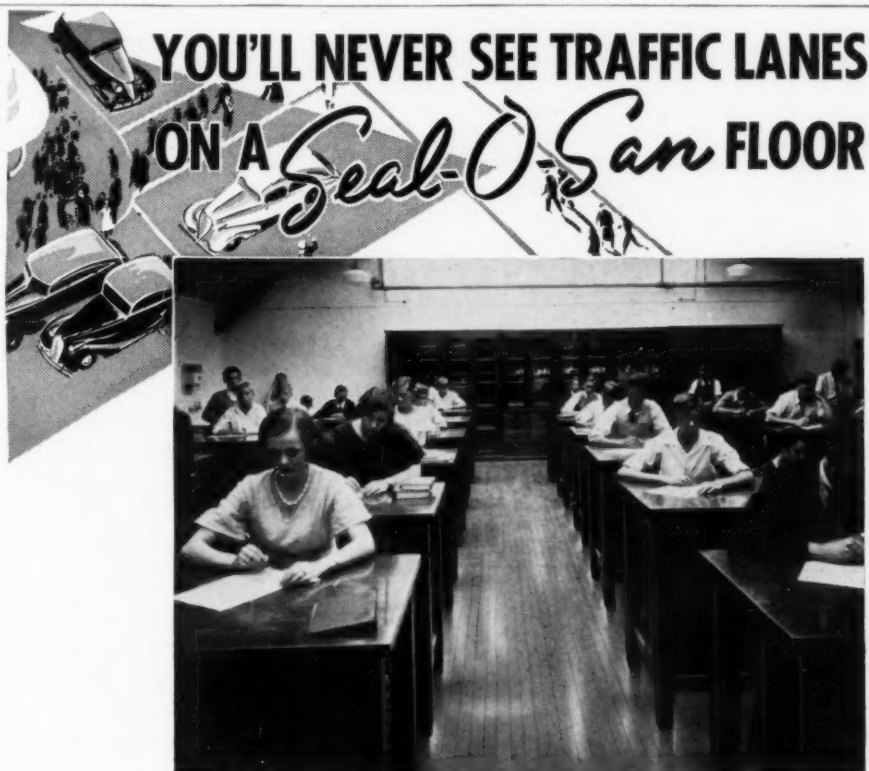
ANNIVERSARIES

Observe 25th Anniversary

The twenty-fifth anniversary of the founding of the school of education of the University of Pennsylvania was

observed in late April with exercises sponsored by the Education Alumni Association.

The opening of the school of education at Pennsylvania in 1914 followed a series of development inspired by growing appreciation of the need of specialized training for teachers. As originally organized, the school had a faculty of three members and a curriculum that provided only for the preparation of secondary school teachers of academic subjects. Today there are 30 full-time members and 23 who are serving on part-time, while a number



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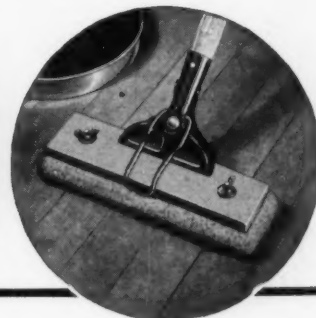
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of faculty members of other departments devote time to instruction in that school.

Action was taken in 1933 whereby the completion of two years of college work was made a requirement for admission.

BUILDINGS

Pupils Build Music Hall

A new music building constructed by 15 members of the vocational carpentry class of the Colusa Union High School, Colusa, Calif., at a cost of \$5000 was opened for public inspection as a feature of the Public School Week program in that city the last week in April. The building was erected under the direction of John Sterk, a local contractor, who qualified to become a member of the school faculty in order to supervise erection of the building.

MEETINGS

Divergent Viewpoints Expressed

"General Education in the United States," the theme of the twenty-second annual meeting of the American Council on Education, brought forth varying

points of view at the sessions held in Washington, May 5 and 6. Representatives from more than 300 educational associations and institutions were in attendance.

At the opening session, Dr. George F. Zook, president of the council, stressed the need of effectiveness and speed in obtaining consideration of the findings and conclusions of important educational studies and research. Doctor Zook stated: "Conclusions are more convincing and realistic if they grow out of well-planned, coordinated experimental procedures."

Dr. Ben H. Cherrington, chief of the division of cultural relations, U. S. Department of State, spoke concerning the opportunities of improving cultural relations with the Latin American republics. Dr. Vivian T. Thayer, educational director of the Ethical Culture Schools, discussed current trends in the development of general education.

The Friday afternoon session took the form of sectional meetings for reports on and discussions of the following projects related to the Council: American Youth Commission, Financial Advisory Service, Educational Motion Picture Project, Commission on Teacher Education and Cooperative Study of Secondary School Standards. Administrative heads gave progress re-

ports on these projects, which were discussed by the audiences.

At the formal dinner session on Friday evening, Dean Herbert E. Hawkes of Columbia College, Columbia University, stressed the need of individualizing higher education to meet the needs of each student, and Sir Willmott Lewis, Washington correspondent of the *London Times*, warned against an "exacerbated nationalism" in other lands and asked if our teaching process was equipped to make us masters of our own fate as individuals and strong enough to protect democracy against a system that would make man "the blind servant of the state."

The Saturday morning session opened with a panel discussion under the leadership of Dr. Mark A. May, director of the Institute of Human Relations of Yale University. The panel discussion brought forth conflicting points of view and aroused considerable discussion.

During the closing Saturday afternoon session, Daniel A. Prescott advised personnel departments in colleges and high schools to study the students' background, experience, aspirations and job possibilities in order to provide an education to suit their needs.

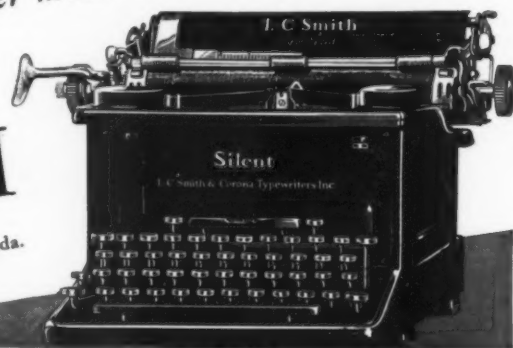
Mortimer J. Adler, associate professor of philosophy of law, University



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of Chicago, closed the meeting with an attack on "false liberalism," stating that American education is moving in the wrong direction. He stated that the ultimate questions involved in such problems as emotions and the educative process are all moral and cannot be answered by science and insisted that the major problems of education had already been solved. "In the light of what we know about man," he said, "without the aid of scientific research, it is demonstrably true that man's well-being depends upon the regulation of his emotional life by reason, what the ancients called the discipline and the moderation of the passions. This discipline can be accomplished only by the formation of good habits of action and passion and these good habits are the moral virtues."

Doctor Zook was reelected president of the council and Dr. Mark A. May was elected chairman of the board for the coming year.

SUMMER COURSES

Elementary School Clinics

Two eighteen day elementary school clinics will feature the 1939 program of the University of South Carolina summer school. These clinics will be

conducted for special groups of teachers interested in working on definite problems of the elementary school program. The first session will be from June 19 to July 8; the second, from July 10 to July 29. Enrollment will be strictly by groups, each of which must submit a problem or set of problems that will constitute its work program.

Mechanical Drawing Course

The Massachusetts Institute of Technology has announced a summer course in the study of mechanical drawing and of graphical methods. Such a course is an innovation among technical institutes and offers secondary school teachers an opportunity to broaden their grasp on the entire field and gives them new material that will be valuable in their classroom work.

Cafeteria Managers' Short Course

Nutrition and marketing will be stressed in the program of the third School Cafeteria Managers' Short Course on the campus of the Oklahoma A. & M. College at Stillwater the week of June 12 to 16. The conference is sponsored by the school of home economics in cooperation with the department of trades and industrial education and the department of home

economics education of the division of vocational education of the state department of education. There is no admission fee.

Conference Offers Credit

The third annual conference on Elementary Education, which will be held from July 8 to 21 at the University of California at Berkeley, is to be organized into a course in education offering credit. It will deal with problems of the modern elementary school with emphasis upon the principal's responsibility.

The conference is sponsored jointly by the Department of Elementary School Principals and the University of California School of Education. Dr. George C. Kyte, professor of education and supervising principal of the University Elementary School, University of California, will be in charge.

In the mornings the program will consist of two hours of directed observation in the demonstration school and of one hour in a general assembly, which will be addressed by a specialist.

In the afternoons the study and discussion groups will hold section meetings regarding problems that cover important aspects of the conference theme.

Outstanding educators who have accepted invitations to participate in the

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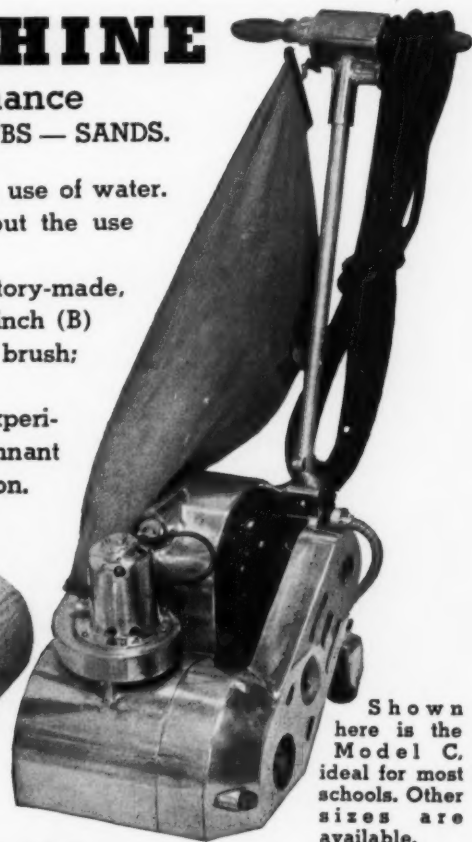
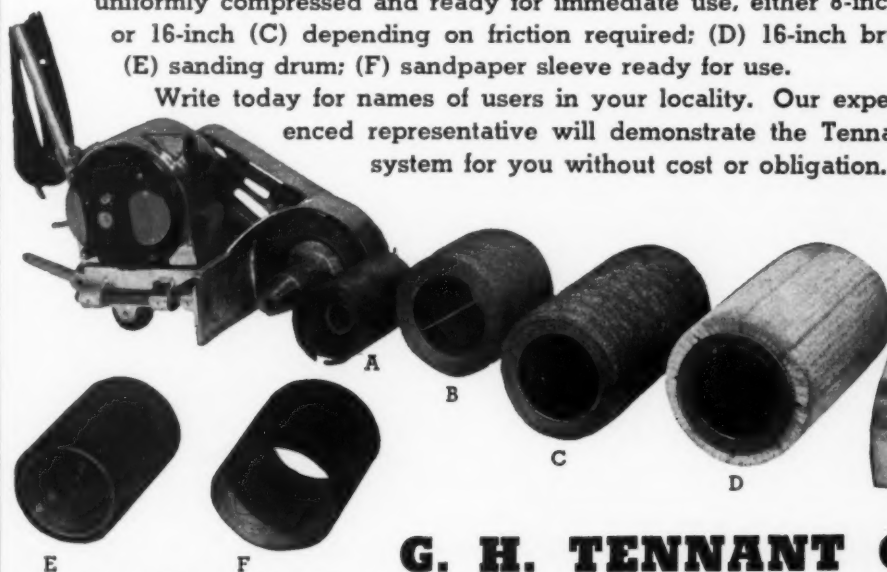
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instructional program are: Dr. Reginald Bell, Stanford University; Dr. Willard E. Givens, N.E.A.; Dr. Julia L. Hahn, Washington, D. C.; Dr. Paul R. Hanna, Stanford University; Helen Heffernan, California State Department of Education; Dr. John A. Hockett, director of the Summer Demonstration School; Dr. Rudolph D. Lindquist, director of the Cranbrook School, Bloomfield Hills, Mich.; Dr. Graham C. Loofbourow, Fresno State College, Fresno, Calif.; Mrs. Gladys L. Potter, California State Department of Education, and Dr. George D. Stoddard, director of the Child Welfare Research Station, University of Iowa.

Educational Conference Week

A new venture at the University of Michigan summer session will be an Educational Conference Week, combining three types of programs, from July 17 to 21. The conference week will be open without fees or other requirements to anyone interested in educational problems.

During the afternoon hours of the conference week a series of programs relating to problems in the field of reading will be presented with major emphasis on newer methods of instruction and on diagnosis and treatment of reading difficulties of pupils.

This will be the third consecutive summer conference on reading problems.

During the late afternoon hours and in the evenings the programs of the tenth annual conference on State and National Educational Issues will be presented. The speakers for the various programs will be drawn largely from the staff of the summer session.

During this conference week an exhibit of recent textbooks will be provided in cooperation with the Michigan representatives of the publishers of textbooks.

NAMES IN NEWS

Superintendents

ARTHUR J. LAIDLAW, superintendent at Ogdensburg, N. Y., for the last sixteen years, has been appointed superintendent at Kingston, N. Y., as successor to BART C. VAN INGEN, whose retirement becomes effective August 1.

HAROLD SIMAR, principal of Leuzinger High School at Lawndale, Calif., will succeed GEORGE M. GREEN as district superintendent of Inglewood schools, Inglewood, Calif., when he retires after more than twenty-five years of service.

NAT WILLIAMS, superintendent at Baird, Tex., has accepted the post as

superintendent at Ballinger, Tex. He was selected from a list of 80 applicants to succeed H. C. LYON. He will take office at the beginning of the next school term.

LOWELL MASON, Lewiston, Idaho, has been elected superintendent of schools at Kendrick, Idaho, to succeed J. M. LYLE JR., who has resigned to accept a similar post at Grangeville.

DEWEY ALBERT STABLER, superintendent of schools at Lawton, Mich., has been appointed superintendent at Otsego, Mich.

CLIFFORD D. DEAN, superintendent at Russell, Kan., for three years, has been named superintendent at Lawrence, Kan., succeeding C. E. BIRCH, who resigned.

CLYDE BOYD, high school principal, was elected superintendent at Sand Springs, Okla., recently to succeed Dr. CLYDE H. O'DELL, superintendent for the last seven years.

GORDON R. RENFROW was reelected superintendent in Cooper County, Missouri, recently.

W. FRANK WARREN, who has served as superintendent at Durham, N. C., for four two-year terms, has been reelected to that post by the board of education. He served as principal of the Durham High School for seven years before becoming superintendent.

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STUART T. VANDER VEN, superintendent at Swartz Creek, Mich., has been named superintendent at Brown City, Mich., for next year.

EDGAR SCHUMACHER, a teacher at Baltic, Ohio, has succeeded CLARENCE TROYER, resigned, as superintendent of schools at Baltic.

DONALD SEARLE, principal, has been elected superintendent at Randolph, Minn., succeeding J. V. KIPP, who resigned.

J. H. ENGLAND was elected superintendent of schools at College Springs, Iowa, recently to succeed GEROLD ROWLAND, who has accepted the superintendency at St. Charles, Iowa.

CLARENCE E. NELSON, former principal of Ozona High School, Ozona, Tex., has been named superintendent of schools at Rochelle, Tex., succeeding M. E. NOBLE, who recently was elected superintendent at Rocksprings, Tex.

FRED C. HOBSON of Boonville, N. C., has been elected superintendent of schools at Yadkinville, N. C.

PAUL WENGER, superintendent of schools at Lancaster, Ohio, was re-employed by the board of education for the next five years.

CARL A. FURR, principal of the Woodleaf School in Rowan County, North Carolina, for the last fourteen years, has been named county super-

intendent in Cabarrus County, North Carolina.

CHARLES E. DAVIS, superintendent in Boulder County, Colorado, was elected president of the Colorado County Superintendents Association recently. He succeeds Mrs. MARY H. PETERSON of Arapahoe County.

REV. LEO M. BYRNES has been appointed superintendent of education of the Catholic Diocese of Mobile, Ala., by BISHOP THOMAS J. TOOLLEN. Father Byrnes will direct all parochial schools in Alabama and northwest Florida, succeeding the late Msgr. L. J. CARROLL.

J. C. MILLER, superintendent at Lordsburg, N. M., has been named superintendent at Deming, N. M., to succeed E. D. MARTIN, who will retire July 15.

WAYNE MASE, Minneapolis grade school principal, is the new superintendent at Bennington, Kan., succeeding GEORGE HENSELY, who becomes superintendent at Centralia, Kan.

WILLIAM E. BISHOP has been elected superintendent at Boone, Colo., succeeding CHESTER S. HATCH, resigned. Mr. Bishop has been principal of Boone High School.

MAURICE S. HAMMOND, who is an education instructor at New York University, has been appointed superintendent of schools at Catskill, N. Y.,

to succeed JOSEPH M. SCHNITZER, who resigned.

THOMAS W. MAHAN was reelected for a two year term as superintendent of schools at Putnam, Conn.

DON VAUGHN of Panhandle, Tex., will succeed JOHN M. MIZELL as superintendent at Phillips, Tex., next year.

A. SHIPP WEBB was reelected superintendent of schools for his thirtieth year recently at Concord, N. C.

FLAVEL M. GIFFORD, superintendent at Holliston, Mass., will succeed CHARLES F. PRIOR, retiring superintendent of schools at Fairhaven and Mattapoisett, Mass.

JENNIE JO HACKWARD, principal of the Huntsville High School, Huntsville, Mo., won the race for superintendent of schools in Randolph County, Mo., recently and became the first woman to hold the office in that county.

R. P. SWEENEY was reelected superintendent of schools at Santa Fe, N. M., for the coming year.

MAX SMITH has accepted a two year contract as superintendent of schools at Reading, Mich. Mr. Smith has been the principal for the last several years. He succeeds CHARLES B. PARK, who resigned to accept the superintendency at Mount Pleasant, Mich.

ROY H. VALENTINE, principal of Newcastle High School at Newcastle,



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Ind., has been made superintendent of schools in that city.

L. E. STARK, who has been superintendent at White Hall, Ill., for the last eight years, has accepted the superintendency at Morris, Ill.

J. FRANCIS CARLE, principal of Boston Township High School at Peninsula, Ohio, has been appointed superintendent at Galena, Ohio, for the coming year.

Principals

RICHARD W. HANN has been named principal of the Stratford Central School at Stratford, N. Y., for the coming year. Mr. Hann has been principal of the Perth Central School, Perth, N. Y., for the last three years.

WILLIAM FLOYD will become principal of West Lafayette High School at West Lafayette, Ind., August 1 in place of C. ROSS DEAN.

FLOYD C. NEWPORT, present principal of the South Glens Falls High School, South Glens Falls, N. Y., has been appointed principal of the New Lebanon Central School, New Lebanon, N. Y.

EARL ROGERS was elected principal of the Ashland Junior High School, Ashland, Ore., succeeding ILA MYERS, resigned.

EDWIN A. JUCKETT, principal of the Keene Central School District, Essex

County, New York, was named supervising principal of high and elementary schools of the new Hyde Park Central School District, Dutchess County, New York.

J. H. NOBLIN has been elected principal of Lauderdale High School, Lauderdale, Miss.

T. P. PETERSEN, for the last seven years coach at Cherry Creek, N. Y., will become the new principal of the high school, succeeding MILTON BROWN, who will take a similar position at Frewsburg, N. Y.

O. M. WISEMAN, principal at Proctorville, Ohio, has been employed as supervising principal at South Point, Ohio. He succeeds EDWIN SHAFER.

DR. A. B. CRAWFORD, principal of Bryan Station High School, Bryan Station, Ky., was elected principal of the new Lafayette High School at Pica-dome, near Lexington, Ky. It will open next fall.

WILBUR E. BERGER has been named principal of Coaldale High School at Coaldale, Pa., to succeed A. CLAIR MOSER, principal for the last ten years, who has been appointed assistant executive secretary of the Pennsylvania State Education Association.

FRANKLIN B. CLARK has been appointed principal of the new Tioga Center Central School, Waverly, N. Y.

Mr. Clark has been a member of the faculty at the Peru High School, Peru, N. Y., for the last six years, serving as principal for the last three years.

H. F. SRYGLEY, superintendent at Nashville, Tenn., who served as superintendent of schools at Raleigh, N. C., for a number of years prior to 1930, has returned to his former residence in Burke County, North Carolina, to take over the principalship of the George Hildebrand School. Mr. Srygley left Raleigh nine years ago to become superintendent at Nashville.

Deaths

DR. THOMAS S. BAKER, president emeritus of the Carnegie Institute of Technology, died recently, just two weeks after his sixty-eighth birthday. Prior to his connection with Carnegie, Doctor Baker was associate professor of German, then professor of modern languages as well as a lecturer on modern German literature at Johns Hopkins University.

SAMUEL H. WHITE, 36, superintendent for Killingly and Brooklyn, Conn., since September, died unexpectedly in a Boston hospital where he had been a patient for less than a week. He had been ill of pneumonia.

VIRGINIA RANDOLPH ELLETT, headmistress emeritus of St. Catherine's

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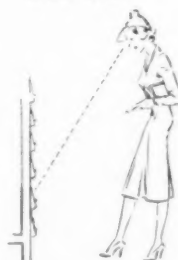
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Coming Meetings

June 15-17—School Administrators' Conference, Peabody College, Nashville, Tenn.
 June 19-22—National Conference on Visual Education, Chicago.
 July 2-6—National Education Association, San Francisco.
 July 3-6—National Convention of Student Officers and Advisers, San Francisco.
 July 8-15—Third Annual Reading Laboratory Institute, George Peabody College for Teachers, Nashville, Tenn.
 July 7-9—Conference on "Educational Frontiers," Stanford University, Calif.
 July 8-21—Conference on Elementary Education, University of California, Berkeley.
 July 10-21—School Executives' Conference, University of California, Berkeley.
 August 6-11—World Federation of Education Association, Rio de Janeiro, Brazil.
 Oct. 6-7—Colorado Education Association, district meetings at Durango.
 Oct. 9-13—National Council on Schoolhouse Construction, New York City.
 Oct. 9-13—Recreation Congress, Boston.
 Oct. 12-13—Minnesota Education Association, northeast division, Duluth.
 Oct. 12-14—Utah Education Association.
 Oct. 12-14—Vermont Education Association, Burlington.
 Oct. 16-20—National Association of Public School Business Officials, Cincinnati.
 Oct. 19-20—Minnesota Education Association, division meetings at St. Cloud, Bemidji, Winona, Mankato, Moorhead.

Oct. 19-20—New Hampshire State Teachers' Association, Keene.
 Oct. 19-21—South Dakota Education Association, district conventions at Sioux Falls and Aberdeen.
 Oct. 25-27—North Dakota Education Association, Bismarck.
 Oct. 26-27—Indiana State Teachers' Association, Indianapolis.
 Oct. 26-27—Maine Teachers' Association, Lewiston.
 Oct. 26-28—Rhode Island Institute of Instruction, Providence.
 Oct. 26-28—Montana Education Association, district conventions at Miles City, Livingston, Missoula, Great Falls and Glasgow.
 Oct. 26-28—South Dakota Education Association, district conventions at Pierre and Deadwood.
 Oct. 26-28—Colorado Education Association, district meetings at Denver, Pueblo and Grand Junction.
 Oct. 27-28—Maryland State Teachers' Association, Baltimore.
 Nov. 1-3—West Virginia Education Association, Wheeling.
 Nov. 2-4—Conference of Food Service Directors, Boston.
 Nov. 5-11—American Education Week.
 Nov. 9-12—New Jersey State Teachers' Association.
 Nov. 15-17—Association of Land Grant Colleges and Universities, Willard Hotel, Washington, D. C.

School, Westhampton, Va., died recently after an illness of three weeks.

EDGAR J. LLEWELYN, superintendent at Newcastle, Ind., died suddenly following a heart attack.

B. B. JACKSON, who served as superintendent of Minneapolis schools from

1917 to 1922, died recently in Los Angeles where he had been living. He was 72 years old.

CLARA DELANDER, superintendent of schools, Edwards County, Kansas, suffered a fall from a horse that resulted in her death.

In the Colleges

DR. CLARENCE O. LEHMAN has been appointed principal of Potsdam Normal School, Potsdam, N. Y., by the New York State Board of Regents. Doctor Lehman has been director of training of the Geneseo Normal School since 1929; he is president of the central western zone of the New York State Teachers Association.

DEAN EMERITUS ALLEN S. WHITNEY of the University of Michigan received the first degree of doctor of education conferred by the university at the annual convocation of the school of education on May 9.

DR. FRANKLYN BLISS SNYDER, vice president and dean of faculties at Northwestern University, will become president of the school next fall.

D. E. SCATES, director of the research bureau, Cincinnati, will leave that position this month to become associate professor of education at Duke University.

LAYTON S. HAWKINS, instructor in trade and industrial teacher training at New York University, has been appointed chief of the trade and industrial education service in the U. S. Office of Education.

DR. WILLIAM WEBSTER HALL JR., 36 years old, dean of the American College at Sofia, Bulgaria, was chosen



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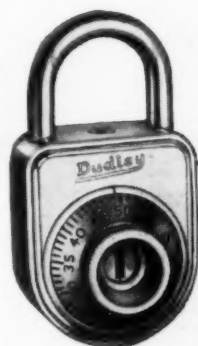
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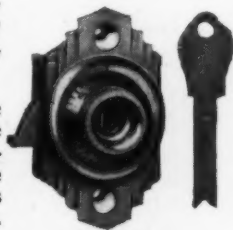
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the third president of the half-century-old College of Idaho at Caldwell recently. He succeeds Dr. RAYMOND H. LEACH, who resigned nearly a year ago.

OVID WALLACE ESHBACH, 46, a personnel official of the American Telephone and Telegraph Company, has been named dean of Northwestern University's new institute of technology.

DEANE W. MALOTT, associate professor of business at Harvard University, was called to the chancellorship of the University of Kansas on April 10 by the board of regents. The successor to CHANCELLOR E. H. LINDLEY, who retires June 30, is a native Kansan and is 41 years of age.

OLGA ADAMS, associate professor of education, University of Chicago, was elected president of the Association for Childhood Education at its forty-sixth annual convention recently at Atlanta, Ga. LOUISE ADLER of Milwaukee State Teachers College was made vice president representing kindergartens, and M. ELISABETH BRUGGER of Iowa State Teachers College, vice president representing nursery schools.

Dr. C. A. HOWARD, president of the Eastern Oregon College of Education for the last two years, has been appointed to the presidency of the Oregon College of Education at Monmouth and director of teacher training for the state

system of higher education. Doctor Howard, who was state superintendent of public instruction for ten years, will succeed J. A. CHURCHILL, who will remain as president emeritus of the college and as professor of education.

Dr. CHRISTINA PHELPS GRANT has been appointed to succeed MABEL FOOTE WEEKS as assistant to the dean in charge of social affairs at Barnard College.

Resignations and Retirements

Dr. JAMES W. PUTNAM, who has been president of Butler University since January 1935, has submitted his resignation to the board of directors. He will become president emeritus and head of the graduate division, succeeding in the latter capacity Dr. HENRY LANE BRUNER, retired. No successor is under consideration at present.

J. B. McMANUS, for thirty-nine years superintendent of public grade schools at La Salle, Ill., has resigned from that position because of failing health.

E. A. HUFF, superintendent of grade schools at Farmington, Ill., for the last twenty years, has resigned. R. B. TROXEL, principal at Farmington High School for the last five years, will succeed Mr. Huff.

Mrs. MINNIE SALISBURY, principal of Babcock Street School, Silver Creek,

N. Y., and LeROY HARRINGTON, vice principal of the Silver Creek public schools, will retire this month. They recently were given a testimonial banquet by members of the faculty.

WILLIAM C. SMITH, chief of the division of adult education of the New York State Education Department, will retire July 1, having served more than fifty years in educational work.

JOHN T. SYMONS, superintendent at Coldwater, Mich., for eleven years, will be succeeded next year by ROBERT E. SHARER, senior high school principal.

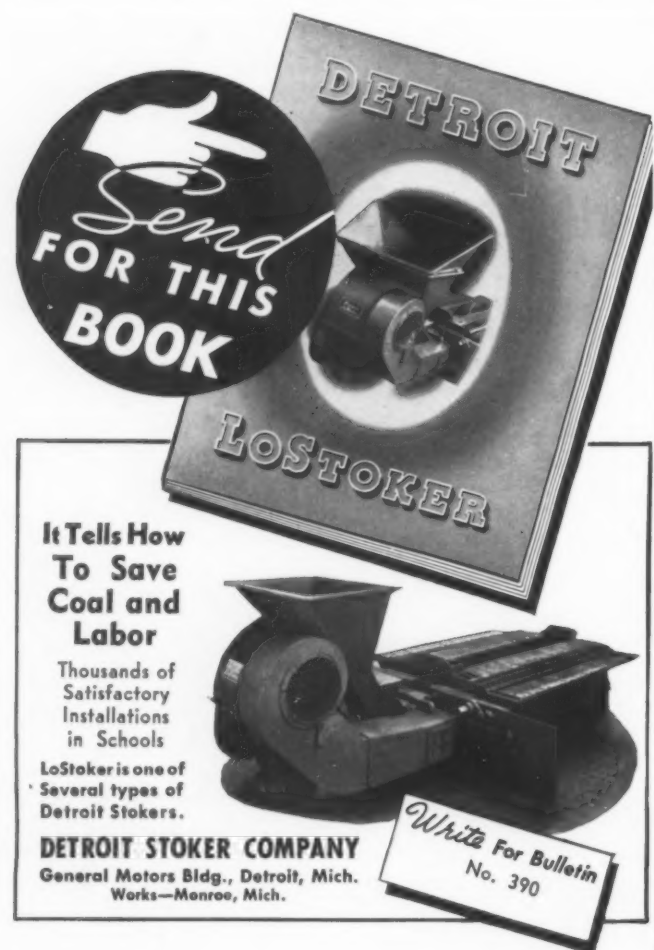
REGINALD STEVENS KIMBALL, superintendent of the Monson, Brimfield and Wales school district, Monson, Mass., has resigned.

F. R. HARRIS will retire as superintendent of schools at Greenfield, Ohio, in June, concluding thirty-six years' service in the Greenfield school system.

H. S. BUTLER has resigned as principal of the Castile High School at Castile, N. Y.

CANNIE R. MILLER, principal of the DuBois Junior High School, DuBois, Pa., will retire at the close of the current school year after forty-six years' service.

ALVIN S. GRUVER, principal of the Bethlehem High School, Bethlehem, Pa., for the last twelve years, has announced his retirement in June.



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THE BOOKSHELF

CITY PLANNING: WHY AND HOW. By Harold MacLean Lewis. New York: Longmans, Green and Company, 1939. Pp. xxi+257. \$2.50.

Simple treatment of a technical subject prepared primarily to interest the layman and to give him an overview of this broad field.

AMERICAN SAGA. By Marjorie Barstow Greenbie. New York: Whittlesey House, McGraw-Hill Book Company, 1939. Pp. x+682. \$4.

Vivid story in three significant parts of the development of that part of the western hemisphere now called the United States. It is a story derived from intimate human sources which actually makes the pioneers live again for us. Something more than straight orthodox history.

THE MECHANISM OF THOUGHT, IMAGERY AND HALLUCINATION. By Joshua Rosett. New York: Columbia University Press, 1939. Pp. x+289. \$3.

Thought is defined as "a subjective reproduction of objective experiences, in which the orientation in the past is coexistent with and guided by a large

amount of orientation in the present; and which, notwithstanding the vagueness of the sensations reexperienced, is accurate with respect to their relations as they are integrated into memories of situations."

TWELVE WAYS TO BUILD A VOCABULARY. By Archibald Hart. Educational Edition. New York: E. P. Dutton & Company, Inc., 1939. Pp. 128. \$1.

Offers opportunity for the mature individual who wishes to increase his control over words to do so by means of simple practices that are interesting as well as educational.

THE GOVERNMENT OF EDUCATION IN METROPOLITAN CHICAGO. By John Albert Vieg. Chicago: The University of Chicago Press, 1939. Pp. xviii+274. \$2.50.

A political scientist suggests the reform of educational administration in Chicago by abolishing the mayor-appointed board, making the schools a department of municipal government with the mayor responsible for the appointment of the superintendent. How

this arrangement would separate the schools from the municipal machine the author does not state. Another blueprint theory of efficiency!

THE SABER-TOOTH CURRICULUM. With a Foreword by Harold Benjamin. New York: McGraw-Hill Book Company, Inc., 1939. Pp. xiii+139. \$1.

A satire that punctures most of the pontifical assumptions of the Essentialists. One of the bright spots in light educational writing. Read it and laugh.

SCHOOL SUPPLIES: Selection, Storage in Small Cities and the Use of Specifications in Purchasing School Supplies and Equipment. Prepared by the Research Committee on Supplies and Equipment. Pittsburgh: National Association of Public School Business Officials, 1938. Pp. 143. (Paper Cover.)

Valuable organization of procedures relating to the service of supplies in small communities. Practical, sensible, brief.

AMERICA IN MIDPASSAGE. By Charles A. Beard and Mary R. Beard. Vol. 3. *The Rise of American Civilization.* New York: The Macmillan Company, 1939. Pp. 977. \$3.50.

Significant history of the last ten years in which the "golden glow" of Coolidge and Hoover fades into the



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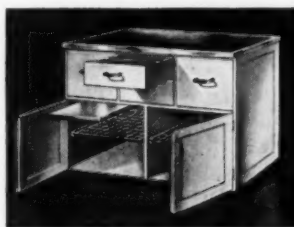
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"midpassage" of Roosevelt. Restrained, but strong delineation of a crucial decade. History brought up to date.

SOCIAL SERVICES AND THE SCHOOLS. *Educational Policies Commission. Washington, D. C.: National Education Association, 1939. Pp. xi+147.*

Enlargement of certain policies concerning quasi-educational services presented in an earlier report.

Just Off the Press

EUROPE: *The Great Trader. By Alison E. Aitchison. Illustrated. Indianapolis: The Bobbs-Merrill Company, 1939. Pp. vi+424. \$1.04. Wholesale Price: \$0.78.*

SELECTED LEGAL PROBLEMS IN PROVIDING FEDERAL AID FOR EDUCATION. *Staff Study No. 7. Prepared for the Advisory Committee on Education. Washington, D. C.: U. S. Government Printing Office, 1938. Pp. ix+71. \$0.15 (Paper Cover).*

THE EVALUATION OF A TECHNIQUE FOR MEASURING IMPROVEMENT IN ORAL COMPOSITION. *By Royal F. Netzer. Iowa City, Iowa: University of Iowa, 1939. Pp. 48. (Paper Cover).*

EDUCATION WITHIN PRISON WALLS. *By Walter M. Wallack; Glenn M. Kendall, and Howard L. Briggs. New York: Bureau of Publications, Teachers*

College, Columbia University, 1939. Pp. viii+187. \$2.25.

THE ORGANIZATION AND TEACHING OF SOCIAL AND ECONOMIC STUDIES IN CORRECTIONAL INSTITUTIONS. *By Glenn M. Kendall. New York: Bureau of Publications, Teachers College, Columbia University, 1939. Pp. xii+159. \$1.85.*

EXPLORING THE WORLD OF SCIENCE. *By Charles H. Lake; Henry P. Harley, and Louis E. Welton. New York: Silver Burdett Company, 1934, 1939. Pp. ix+710. \$1.80.*

FEDERAL AID AND THE TAX PROBLEM. *Staff Study No. 4. Prepared for the Advisory Committee on Education. Washington, D. C.: U. S. Government Printing Office, 1939. Pp. ix+101. \$0.15 (Paper Cover).*

SUPPLEMENTARY STANDARDS FOR THE SMALL TWELVE-GRADE SCHOOL BUILDING. *By Merle A. Stoneman and Knute O. Broady. Lincoln, Neb.: Teachers College, University of Nebraska, 1939. Pp. xi+183.*

HANDBOOK OF ENGLISH FOR BOYS AND GIRLS. *Prepared by a Committee of the National Conference on Research in English, Delia E. Kibbe, Lou L. LaBrant, Robert C. Pooley, Chairman. Edited by C. C. Certain. Chicago: Scott, Foresman and Company, 1939. Pp. 128. \$0.60, List.*

VOCATIONAL REHABILITATION OF THE PHYSICALLY DISABLED. *Staff Study No. 9. Prepared for the Advisory Committee on Education. Washington, D. C.: U. S. Government Printing Office, 1939. Pp. ix+101. \$0.15 (Paper Cover).*

GAMES, DANCES AND ACTIVITIES. (*Junior Athletics.*) *For Physical Education. By Fred L. Bartlett. New York: Noble and Noble, Publishers, Inc., 1939. Pp. xii+168. \$2.*

A MANUAL ON THE EVALUATION OF STUDENT REACTIONS IN SECONDARY SCHOOLS. *By Roy C. Bryan and Otto Yntema. Kalamazoo, Mich.: Western State Teachers College, 1939. Pp. 56. (Paper Cover).*

OUR SONGS. *A Singing School. Edited by Theresa Armitage, Peter W. Dykema, Gladys Pitcher and others. Boston: C. C. Birchard and Company, 1939. Pp. 176.*

A PLEA AND A PLAY. *By Welford Beaton. Hollywood, Calif.: Hollywood Spectator, 1939. Pp. 92. \$1.*

SELECTED REFERENCES IN EDUCATION—1938. *Supplementary Monograph No. 47. Edited by Leonard Koos and Newton Edwards. Chicago: University of Chicago, 1939. Pp. x+221. \$0.90.*

A STUDY IN FACTOR ANALYSIS: THE STABILITY OF A BI-FACTOR SOLUTION.



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By Karl J. Holzinger and Frances Swineford. *Supplementary Monograph No. 48. Chicago: University of Chicago, 1939. Pp. xi+91. \$1.*

TOWARD A HEALTHY AMERICA. By Paul de Kruij. *Public Affairs Pamphlets No. 31. New York: Silver Burdett Company, 1939. Pp. 31. \$0.10 (Paper Cover).*

IT'S SAID THAT—

Ten representative washroom layouts have been selected from the files of the BRADLEY WASHFOUNTAIN COMPANY, Milwaukee, and reproduced in booklet form; the booklets will be supplied free to those interested in washroom planning. . . . Vul-Cot wastebaskets, manufactured by the NATIONAL VULCANIZED FIBRE COMPANY, Wilmington, Del., will not crack, dent, split, splinter, rust or corrode; they are guaranteed for five years. . . . Krimmel automatic gymnasium mat hangers prevent mat destruction and afford protection against injury under basketball backstops. They are manufactured by WALTER S. SMITH SALES COMPANY, Syracuse, N. Y.

THE HILD FLOOR MACHINE COMPANY's (Chicago) new all purpose vacuum machine has 15 attachments for wet or dry vacuuming of upholstery,

rugs and carpets; for cleaning overhead pipes, venetian blinds, walls, draperies and between radiator coils, and for blowing out motors and other machinery. . . . The tubular fire escapes built by the STANDARD CONVEYOR COMPANY, North St. Paul, are entirely free from rivet or bolt heads and no raw edges of the metal are exposed; the entrance to the escape is fitted with two doors, both of which are opened by the operation of a panic bar on either of the doors.

A handsome full leather portfolio for filing complete information regarding its line of showers and fixtures is being distributed by the SPEAKMAN COMPANY, Wilmington, Del. Each classification is clearly indicated, making it possible to obtain complete information on all types of equipment.

To overcome the difficulty of adapting new sizes of lamps to existing equipment, a new adjustable socket has been manufactured by the GOODRICH ELECTRIC COMPANY, 2900 North Oakley Avenue, Chicago; it provides vertical adjustment for the proper positioning of lamps in reflectors. . . . The requirements of many schools may now be economically met with the new radio and talk-back equipment recently announced by the BELL SOUND SYSTEMS, INC., Columbus, Ohio. The equipment provides for radio, phonograph or voice

amplification, as well as for intercommunication with as many as 40 outlying stations. . . . A new catalog has been released by the NATIONAL TIME & SIGNAL CORPORATION, Detroit, describing its line of Syncrotime clocks and program equipment for schools and institutions; copies are available on request.

An attractive brochure explaining the origin of the use of academic costumes and defining the regulations regarding their wear today has been published by the E. R. MOORE COMPANY, 425 Fifth Avenue, New York, under the title, "The Story of Caps and Gowns." . . . The COCHRANE CORPORATION of Philadelphia, manufacturer of zeolite water softening equipment, has released a new catalog discussing the various applications of zeolite and describing typical installations.

W. J. Hill, for the last twenty years sales manager of the DETROIT-MICHIGAN STOVE COMPANY, Detroit, died April 20 after an illness of several weeks. Mr. Hill had been associated with the organization for forty-two years.

Effective June 12, Albert D. McCarthy, former school equipment salesman for the Wolkins Company, will head the New England sales department of the HEYWOOD-WAKEFIELD COMPANY school furniture division at 174 Portland Street, Boston.



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Sources of Films

(Continued from page 48)

tributed through extension divisions or by the concern itself.

Many films are distributed by the Y.M.C.A. Some of the best films available are so sponsored, also some of the poorest. For this reason, more care is needed in selecting this class of films than is needed in any other group and, at the same time, selection is difficult.

Magazine reviews are good guides, as is the Educational Film Catalog. As a general rule, they will tend to be found most suitable for the third and fourth of the foregoing situations, although occasionally a catalog description will indicate other and more extended uses. Of varying lengths, they are rarely made under the guidance of educators or with reference to a specific curriculum. The majority seem to be best adapted for showing everyday applications and lifelike situations of traditional content. Each film is usually more or less self-explanatory and, if otherwise suitable, can be used satisfactorily in the assembly or other situa-

tions independent of the classroom work.

Another group of films is composed of those produced originally as short subjects in theaters and subsequently made available to schools. These are available principally from commercial distributors, although a few are in the catalogs of the extension divisions or university and state departments of education. Generally speaking, these films are of excellent quality so far as photography, sound (if any), direction and interest appeal are concerned. As such, they are likely to be good choices for assembly or similar programs and often are excellent to supplement and to enrich the curriculum in the classroom, a fact that may be determined from the catalog description. Many of them will be less satisfactory for the first two situations, if strictly factual curricular content is desired.

The documentary film has been recently coming to the fore and promises to offer an invaluable service to education. "The River" and "The Plow That Broke the Plains" are pictures that received wide acclaim in the theaters. Aimed less to

provide specific information than to create attitudes and generalizing insights, these films may eventually prove to be the screen's greatest contribution to education, some feel. The best known examples are the "March of Time" films and the two noted previously. The "March of Time" pictures are (at the time of writing) available in 16 mm. only from the Association of School Film Libraries by sale, although arrangements are now being made to have them available for rental in libraries throughout the country. About 30 subjects are to be so distributed.

A large number of documentary films have been produced in Europe and are being made available in increasing numbers in this country through distributors such as Garrison and Gutlohn. While their sound and other technical details often fall far short of the standards set in this country, their possibilities in accomplishing educational aims in a wide range of subject fields may well offset their defects.

For the social studies field, in addition to the documentary films, there is a further vast store of material

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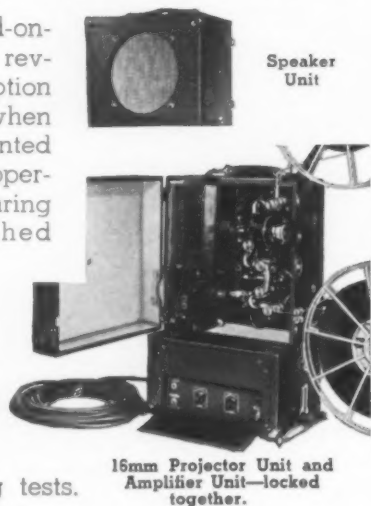
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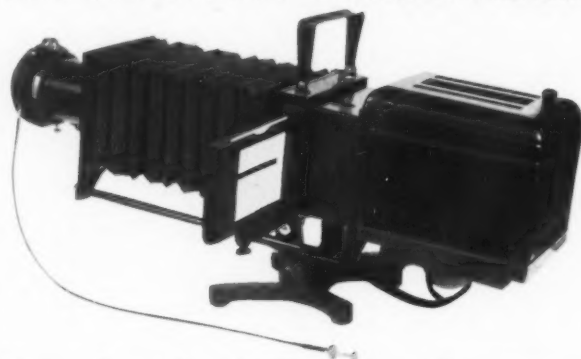
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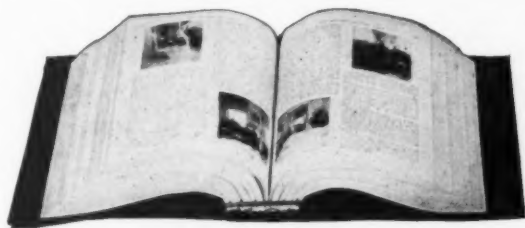
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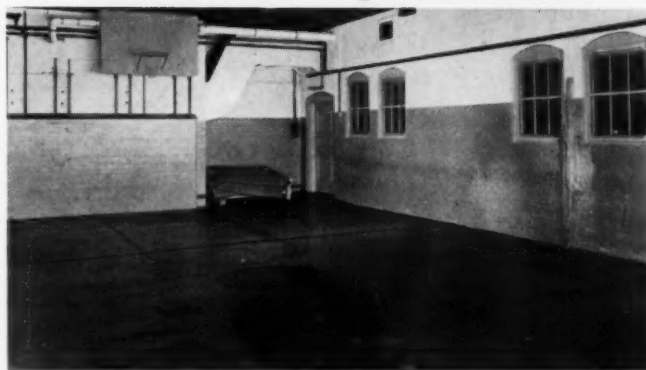
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just becoming available in 16 mm. size. Many of the social and historical dramas produced for theaters are of inestimable value. The suggestions that follow, regarding the selection of entertainment films, apply equally to this group.

There are available also a large number of direct propaganda films; the advisability of their use is championed in some circles and denounced in others. Communism, fascism, democracy, capitalism, the right to strike, war—virtually every important controversial issue has been covered. Should we show one side, both sides or neither? One thing is certain, the pupils will be seeing more and more of these outside the school from now on. These films are more generally available from commercial distributors.

Since projection equipment is used for entertainment in schools, as well as for educational purposes, a few pointers concerning entertainment films should be included. Any of the types of films mentioned so far are often used on entertainment programs and many good short sub-

jects, comedies and cartoons are available from most distributors.

If good feature films are desired, however, considerable care must be exercised. Many of the films available at the present time are out of date and poorly acted, directed and photographed as compared with present day standards. At the same time, there is an ever increasing number of first-class feature pictures which are reasonably recent hits from the theaters. The out-of-date films are generally offered at a lower rental rate. The better feature pictures may be easily recognized by their better known actors and producers, if not by title. Distribution of many of the latter features is restricted to areas in which there is no competition with theaters or to showings where no admission is charged. The recent major Hollywood productions are handled by a limited number of distributors, some of which are mentioned in the accompanying list.

Sources of 16 mm. Films

General Directories of Films

EDUCATIONAL FILM CATALOG. New York: H. W. Wilson Co. Periodic cumulative volumes with quarterly supplements. Publishers of *Readers' Guide* and *Education Index*. Lists

several thousand films classified according to subject. Full information given, including various distributors and rental or sale price, content described, and critical review included when available. \$4 per year, including latest cumulative volume and quarterly supplements. Invaluable.

1000 AND ONE. Chicago: Educational Screen. Published annually. Lists several thousand films, classified according to subject; gives brief statement of content and indicates film size, whether sound or silent, and distributors. 75 cents (25 cents to subscribers of *Educational Screen*).

DIRECTORY OF U. S. GOVERNMENT FILMS. Washington, D. C.: U. S. Film Service. All government films now listed by this agency, recently organized to coordinate the motion picture activities of various departments.

CATALOG OF ASSOCIATION OF SCHOOL FILM LIBRARIES, INC., New York. Volume 1, March 1939. Free to members; membership \$5. Operating under General Education Board grant. Gives full data: price per reel, name of producer, distributor, date produced, contents, description, appraisal and suggested uses when available. Issued in loose-leaf form with monthly supplements, each film on a separate page. This constitutes a recommended list. Primarily intended for information of member distribution libraries and at present contains largely films for sale. Valuable source of information regarding many films in distributors' catalogs and regarding new films. Present volume contains about 100 films; addition of about 200 new listings per year contemplated.


Directories of Film Sources

DIRECTORY OF 16MM. FILM SOURCES. Davenport, Iowa: Victor Animatograph Corporation. Revised periodically. Last edition, February 1939. 50 cents. Lists more than 500 public and privately operated sources of films with libraries varying from one reel to thousands of reels, with types of films handled by each indicated. Also includes subject reference index.

SOURCES OF VISUAL AIDS FOR INSTRUCTIONAL USE IN SCHOOLS. By Cline M. Koon. U. S. Department of Interior, Office of Education Pamphlet No. 89, 1937. 10 cents. All types of visual aids, including the motion picture. Sources only listed.

FREE FILMS FOR SCHOOLS. Chicago: DeVry Corporation. 25 cents. Lists 1400 free films from more than 300 sources. Number of reels,

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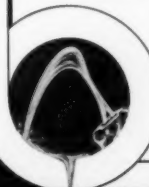
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COMPOSITE LIST OF NONTHEATRICAL FILM SOURCES. U. S. Bureau of Foreign and Domestic Commerce, 1935. 10 cents. Lists distributors classified according to subject matter handled.

TEACHING WITH MOTION PICTURES. A GUIDE TO SOURCES OF INFORMATION AND MATERIALS. By Mary E. Townes. New York: Bureau of Publications, Teachers College, Columbia University. 25 cents. Indicates general lists and lists on special subjects. Also general bibliography on educational films.

Major Rental and Free Libraries

Extension divisions of the following universities:

Arizona	Iowa	Oklahoma
Brigham Young	Kansas	Oregon State
California	Kentucky	South Carolina
Colorado	Louisiana	South Dakota
Hawaii	Michigan	Texas
Georgia	Minnesota	Washington State
Illinois	Missouri	Wisconsin
Indiana	North Carolina	

Visual instruction departments or services of:

Boston University School of Education
Iowa State College
University of Maine
Pennsylvania College of Women
Syracuse University School of Education
West Texas State Teachers College
West Virginia College of Education

Film services of state education departments of:

Connecticut	New Hampshire
Delaware	Ohio
Massachusetts	Oregon
	New Jersey (State Museum)

U. S. Government Films: For complete catalog see *Directory of U. S. Government Films* (listed above), but order direct from distributing agency indicated in that catalog.

Y.M.C.A. Motion Picture Bureau, 347 Madison Avenue, New York; 19 S. La Salle Street, Chicago; 351 Turk Street, San Francisco. One of the major sources of free films, also a large rental library.

Principal Concerns Producing and Distributing Free Industrial Films

(For more extensive listing see 1000 and One, *Victor Directory* and DeVry Free Films mentioned above.)

Associated British and Irish Railways, Inc., 9 Rockefeller Plaza, New York.

Cunard White Star Line, Advertising Department, 25 Broadway, New York.

General Electric Company, Visual Instruction Section, Schenectady, N. Y.

German Railroads Information Office, 665 Fifth Avenue, New York.

Goodyear Tire and Rubber Company, Motion Picture Department, Akron, Ohio.

Grace Line, 30 Rockefeller Plaza, New York.

International Harvester Company, Inc., 180 North Michigan Avenue, Chicago.

Metropolitan Life Insurance Company, 1 Madison Avenue, New York.

National Tuberculosis Association, 50 West Fifth Street, New York.

Northern Pacific Railway, Passenger Traffic, St. Paul, Minn.

U. S. Steel Corporation, Industrial Relations Department, 71 Broadway, New York.

Western Electric Company, 195 Broadway, New York.

Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa.

Lists on Special Subjects

See current and back issues of *Education Index* for frequent articles and lists in general magazines and subject matter field magazines.

Commercial Libraries Specializing in Educational Films

Akin and Bagshaw, Inc., 1425 Williams Street, Denver, Colo.

American Museum of Natural History, Seventy-Ninth and Central Park West, New York.

Association of School Film Libraries, 30 Rockefeller Plaza, New York (Sale only).

Bell & Howell Co., 1801 Larchmont Avenue, Chicago; 11 West Forty-Second Street, New York; 710 North La Brea Avenue, Hollywood, Calif.

Bray Pictures Corporation, Educational Department, 729 Seventh Avenue, New York.

Burton Holmes Films, Inc., 7510 North Ashland Avenue, Chicago.

Castle Films, RCA Building, New York; Wrigley Building, Chicago; Claus Spreckles Building, San Francisco.

Commonwealth Pictures Corporation, 729 Seventh Avenue, New York.

Cosmopolitan Film Libraries, Inc., 3248 Gratiot Avenue, Detroit.

DeVry Corporation, 1111 Armitage Avenue, Chicago.

Dudley, William H., Visual Education Service, Inc., 736 South Wabash Avenue, Chicago.

Eastman Kodak Company, Kodascope Libraries Division, 33 West Forty-Second Street, New York. (Sale only).

Eastman Kodak Company, Teaching Films Division, 343 State Street, Rochester, N. Y. Edited Pictures System, Inc., 330 West Forty-Second Street, New York.

Erpi Picture Consultants, 250 West Fifty-Seventh Street, New York (Sale only).

Films Incorporated, 330 West Forty-Second Street, New York.

Films of Commerce Company, Inc., 21 West Forty-Sixth Street, New York.

Garrison Film Distributors, Inc., 730 Seventh Avenue, New York. (Specializes in propaganda and foreign films.)

Gutlohn, Walter O., Inc., 35 West Forty-Fifth Street, New York.

Harmon Foundation, Inc., Division of Visual Experiment, 140 Nassau Street, New York.

Harvard Film Service, Biological Laboratories, Cambridge, Mass.

Ideal Pictures Corporation, 80 East Eighth Street, Chicago.

McCrory Studios, Knowledge Builders Film Division, 130 West Forty-Sixth Street, New York.

Y.M.C.A. Motion Picture Bureau, 347 Madison Avenue, New York; 19 South LaSalle Street, Chicago.

Entertainment Film Sources

(Many of the public and most of the commercial libraries listed above distribute entertainment as well as educational films. At present, however, the better and more recent films are available through a few distributors who also list many out-of-date films at a reduced rental.)

Films Incorporated, 330 West Forty-Second Street, New York and 925 North West Nineteenth Street, Portland, Ore.

Bell & Howell, Filmosound Libraries, 30 Rockefeller Plaza, New York; 1801 Larchmont Avenue, Chicago, and 710 North La Brea Avenue, Hollywood, Calif.

To Keep Up With New Films as Produced

EDUCATIONAL FILM CATALOG (described above).

CURRENT RELEASES OF NONTHEATRICAL FILMS. Issued monthly by Motion Picture Division, U. S. Department of Commerce. Subscription \$1 per year.

See also reviews in magazines, such as *The Nation's Schools*, *Educational Screen*, *Schoolastic*, *School Management*.

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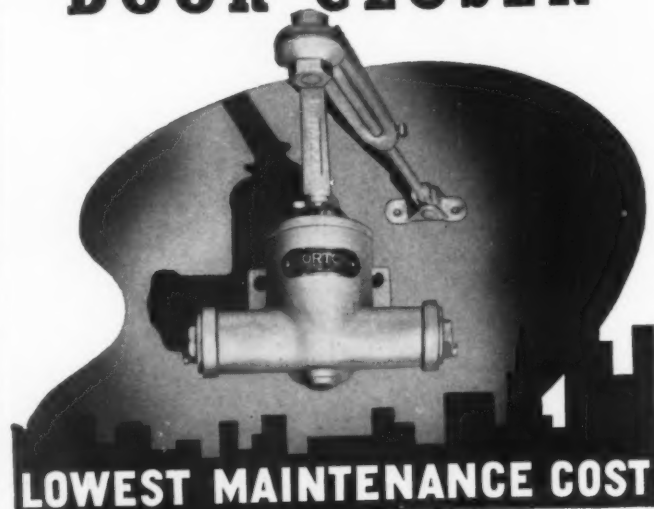
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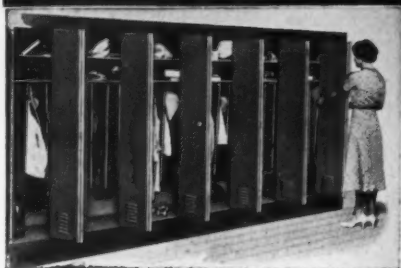
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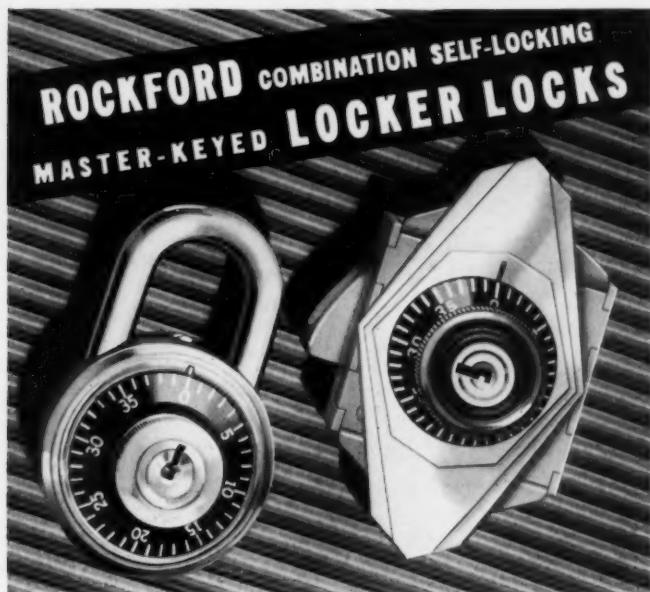
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